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ABSTRACT

The papers in this volume, read at the second national TESOL (Teaching English to Speakers of Other Languages) conference, are grouped by general subject as follows: (1) TESOL as a Professional Field--C.H. Prator, J.M. Cowan, T.W. Russell, J.E. Alatis; (2) Reports on Special Programs--H. Thompson, A.D. Nance, D. Pantell, P. Rojas, R.F. Robinett, B.E. Robinson, E. Ott, S. Hill, M. Finocchiaro; (3) Some Key Concepts and Current Concerns--W.F. Twaddell, R. Lado, V.F. Allen, B.W. Robinett, C.W. Kreidler, P. Strevens, J.D. Bowen, R.B. Lees, M. Joos, A.L. Becker, J.A. Fishman; and (4) Materials and Aids: Their Preparation and Use--K. Croft, F.C. Johnson, S. Ohannessian. The Conference Program is appended. See AL 002 208 for Series I and AL 002 064 for Series III. Papers from TESOL Conferences held after 1966 have appeared in the "TESOL Quarterly" as separate articles, not in series form. (AMM)

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SERIES II

ON TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

CAROL J. KREIDLER, EDITOR

AL 002 208

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ON TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Series II

Papers Read at the TESOL Conference
San Diego, California
March 12-13, 1965

Carol J. Kreidler
Editor

AL 002 208

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Preface

This collection represents a selection of the papers presented at the second national conference on the Teaching of English to Speakers of Other Languages (TESOL), held at San Diego, California, on March 12–13, 1965. Following the papers is a short general report of the conference itself, including a summary of the decisions made at the productive business session.

As the report makes abundantly clear, the San Diego conference was outstanding in terms both of attendance and of the fullness and variety of the program that was offered. It was, indeed, the very fullness of the program that forced the Steering Committee most reluctantly to the decision this year to publish a *selection* of the papers rather than the complete collection, useful as the latter would have been.

In the selection of papers for inclusion in this volume, every effort was made to preserve the balance and proportions of the conference so that the published collection might fairly represent the total program presented at San Diego. As a matter of general policy, we have excluded those papers which have already been published elsewhere. The final selection comprises more than half of the conference presentations; however, a number of papers were not submitted.

The Steering Committee was most pleased that Carol Kreidler of the Center for Applied Linguistics accepted our invitation to serve as the editor of this year's papers. To assist her in the final selection, the committee appointed an Editorial Board consisting of Edward Anthony, David P. Harris, and Betty Robinett.

An undertaking of the size and scope of the TESOL conference requires the cooperative efforts of many individuals and committees. Among those to whom the Steering Committee is especially indebted are Sirarpi Ohannessian, Center for Applied Linguistics, whose imaginative and untiring work as chairman of the conference planning committee accounts in large measure for the success of the San Diego meeting; and Robert A. Bennett, San Diego City Schools, who as chairman of local arrangements was chiefly responsible for providing the excellent setting and facilities for the second TESOL conference. We wish, too, to express our gratitude to all those who participated as speakers, chairmen, and recorders at the San Diego sessions; their names will be found in the report that concludes this volume.

THE STEERING COMMITTEE
FOR THE TESOL CONFERENCES

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TEACHING ENGLISH OVERSEAS

Clifford H. Prator

Perhaps the best way to plunge immediately into the subject of teaching English overseas is to tell you one of my favorite stories about it. This story is a classic which has circulated for a long time in the Philippines in various versions but which may be new to most of the present audience. It is in the form of a letter written by a harassed young teacher of elementary school English to her superior in Manila.

"Dear Mr. Superintendent," it begins. "My works are many, and my pay is few. Besides these thing, my supervisor is now making eyes at me, and I must say 'Oh not, oh not, oh not!' Therefore, I hereby wish to resignate. Truly yours. . . ."

That should give us some idea of the wide range of practical problems involved in teaching English overseas.

I take it that, in the present context, "overseas" means anywhere outside the continental United States, that the teaching we are concerned with is done or at least participated in by Americans, and that by "teaching English" we mean teaching it as a second or foreign language.

A preliminary point to make would seem to be the importance and usefulness of maintaining a clear distinction between teaching English as a second language and teaching English as a foreign language, TESL and TEFL. In the United States we tend to use the two terms indiscriminately, but in many parts of the world TE*S*L is used to designate the teaching of English in a system in which it is to become the partial or universal medium of instruction; on the other hand, TE*F*L is reserved for systems in which English never becomes the medium. We would say that, in this sense, French is taught in the United States as a *foreign* rather than as a *second* language.

The difference between TESL and TEFL is not a matter of terminology alone. We at UCLA find it of such significance that we now divide some of our methodology classes into second language and foreign language sections. TESL ordinarily begins in the elementary school, TEFL at the secondary level. One of the primary aims of TESL must be to acquaint the child with his own culture; the study of the overseas cultures of which the English language is an expression is less urgent and should begin relatively late in the program of TESL instruction. But the teacher of EFL can normally begin to treat the cultures of the English speaking world at the earliest possible moment. In TESL a good command of spoken English is obviously the prime desideratum; in TEFL, on the other hand, a thorough reading knowledge of the language may be more important. Thus TESL and TEFL, while similar in many ways, may vary widely in aims, methods, and content. We should not allow indiscriminate terminology to becloud this essential difference.

Perhaps the relatively new phrase, teaching English to speakers of other languages or TESOL, will be a useful general term which will englobe both TESL and TEFL. But it does make things a little complicated, doesn't it?

Since teachers of English as a second or as a foreign language tend to have itchy feet—that is, to love to travel—I suspect that many of you would appreciate information on opportunities for working overseas. I have therefore had run off copies of a release prepared by the Center for Applied Linguistics in Washington entitled *Organizations Which Employ Teachers of English as a Foreign Language Overseas.*[1] It lists the names and addresses of federal government agencies, private organizations, and American universities which offer employment outside the United States and to which you might wish to write for fuller details.

As you might suspect, among U. S. government agencies it is the Peace Corps which supplies the largest number of teachers for service overseas: 849 volunteers as of the end of 1964. The U. S. Information Agency is second with 164 teachers, the Fulbright Commission third with 29. I have been unable to obtain figures for the Agency for International Development and the Department of State.

With the exception of the Peace Corps, most of these organizations require of those they employ a certain amount of experience and/or specialized training. Some of the jobs to be done involve very great responsibilities indeed: setting up a complete course of study in an institution of higher education, serving as national supervisor of English, advising a ministry of education on language policy in an entire school system. For the latter types of assignment, fully qualified American personnel is still in exceedingly short supply. In the whole area of the humanities today, there is probably no field of study in which advanced training opens up more brilliant opportunities than it does in the teaching of English. On the other hand, the day has probably passed forever when an American could make a career for himself in TESL simply because he was intelligent, educated, and spoke English as his mother tongue.

I have just recently returned from two extended trips to Africa which included visits to ten different and representative countries: Ethiopia, Kenya, Tanzania, Uganda, Nigeria, the Cameroons, Ghana, the Ivory Coast, Sierra Leone, and Senegal. One purpose of the trip was to learn as much as possible about English teaching in that part of the world: courses of study, textbooks, institutions preparing teachers, influential individuals, problems, plans for the future, etc.

Perhaps the strongest general impression which emerged was the ever increasing importance of the role which English is playing in world education. Surely no other language in the history of the world—not even Latin in the heyday of imperial Rome—ever approached being so widely taught and spoken. In spite of newly won independence and galloping nationalism, English is more than holding its own in the countries formerly controlled by Great Britain and is spreading rapidly elsewhere. Interestingly enough, it is in the most anti-Western African nations that some of the most vigorous efforts on behalf of

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[1] Available from the Center for Applied Linguistics, 1755 Massachusetts Avenue, N. W., Washington, D. C. 20036.

English are being made. In Ghana, where Nkrumah's press denounces Anglo-Saxon villainies day after day, English has largely replaced the vernaculars as the medium of instruction in the lower elementary grades, and the most active association of teachers of English anywhere in Africa is flourishing. Both Guinea, the sole former French colony which refused to enter the French Union, and Congo-Brazzaville, whose government is actively supporting the communist-backed rebellion against Moise Tshombe, are sending scores of secondary graduates to Sierra Leone and Nigeria to be trained as English teachers. Landlocked Mali, notwithstanding its far-leftist government and its extreme poverty, has recently set up a series of lavish scholarships to provide up to four years of study abroad for future specialists in TEFL. Kenya is working toward an earlier introduction of English as the instructional medium.

Across the world in Southeast Asia we have the amazing spectacle of Sabah, North Borneo, substituting English for Malay in most of its schools, because of demands made by parents and teachers, at the very moment when the country is being incorporated into Malaysia.

One can only conclude that there are influences even more powerful than nationalism at work in the educational systems of the world today: the preoccupation with material progress and a rising standard of living, the conviction that the attainment of these requires access to modern science, the realization that technology is now ramifying and advancing so rapidly that it is futile to hope that it will ever be made accessible in more than a few languages, the shrinking world and the increased need at all levels for communication in a world language.

English is being taught, then, more widely than ever before. Paradoxically, there has not been—at least in Africa—a corresponding increase of interest in the *way* it is taught. By and large, first-language methods and materials still prevail: that is to say most classes are conducted very much as if the students were young Englishmen. This is true even of many programs carried out under the auspices of American government agencies or universities. Only in a few individuals and at a few institutions does one find a realization of the enormous differences which should exist between teaching children their mother tongue and teaching them a second language, or an awareness of the contributions made to language teaching in the last twenty-five years by the sciences of linguistics and psychology. So far as I know, only one university in Sub-Saharan Africa, Ibadan, offers an up-to-date M.A. program to prepare specialists in TESL. Only in Senegal has a beginning been made toward setting up a center for serious research in applied linguistics. In no country is there yet an extensive well-financed program for improving English instruction on a national scale.

In other words, it would appear that none of the governments or foundations interested in fostering the rapid development of African education has as yet really faced up to a fundamental fact regarding systems in which a second language is the medium of instruction. That is, that the overall effectiveness of such educational systems can be no greater than the effectiveness of the language instruction on which they are based, that the content of education cannot be made to flow efficiently through defective channels.

My linguistic safari to Africa also brought a fresh realization of the extent to which progress in English teaching is hindered, all over the world, by certain needless animosities and rivalries: the American technicians too often mistrust or duplicate the efforts of the British, some French educators are convinced that the Anglo-Saxons want to replace them in their areas of influence, nationalists in many countries insist that it is unpatriotic to try to strengthen the teaching of English or French. In Ethiopia there is at present a race on between the Americans and the British to see who can be first to prepare a series of English texts for the elementary schools; as a result, the work on both sides is being done too fast by too few people, and the successful series will probably be amateurish and one-sided. In the Cameroons the American government installed at considerable expense a fine language laboratory to be used in training teachers of English. But the French *Inspecteur d'Académie* in the national Ministry of Education, apparently because he had not been consulted during the planning of the project, has seen to it that no teachers are allowed to use it. The only use now made of it is by an occasional general evening class for adult beginners. In the Sudan the quality of English instruction has been allowed to deteriorate while considerable resources have been devoted to developing the teaching of Arabic.

The pity of it is that, with a little more vision, open-mindedness, professional pride, and regard for scientific facts, such obstacles could easily be avoided. The job to be done in teaching English and French in the underdeveloped regions of the world is more than enough to require the full coordinated resources of the English and French speaking countries. An encouraging beginning of coordination has already been made at the top. In recent years, with the help of the Ford Foundation and the cooperation of the British, French, and American governments, a series of five international conferences has been held: in Washington, Cambridge, Nijmegen, Besançon, and Rome. A sixth meeting will be convened in Dublin this spring. At these conferences representatives of the three governments, as well as of interested universities and private agencies, have exchanged information regarding their aims and plans, have discussed their accomplishments and problems, and, most importantly, have explored together the possibilities of joint action.

Some concrete results are becoming apparent. This fall a Scotsman was brought to the University of Michigan to direct the famous English Language Institute there. I believe he is in attendance at this conference. A Frenchman was invited to teach the TESL methods course at the Linguistic Institute at Bloomingon last summer. The University of Leeds and UCLA now offer joint curricula whereby future African specialists in TESL can be given a combination of British and American training. The French have set up a *Centre de Linguistique Appliquée* at Dakar which will deal with the teaching of French, English, and the African languages, and whose staff will include Anglo-Saxons.

It is still true, however, that at the operational level in Africa, Asia, and Latin America, there are as yet few evidences of a cooperative approach. There seem to be only one or two countries in the world where even the American agencies involved have developed a cohesive nationwide plan for strengthening

English instruction, and effective international collaboration is almost nonexistent.

I believe that there are a few things that all of us attending this conference can do, certain attitudes we can cultivate, which would materially further the cause of better TESL instruction throughout the world. As a beginning, we can stop our current practice of emphasizing the *differences* between British and American English and concentrate on the much more important fact of the fundamental unity of the two languages and cultures. We should make more effort to learn and teach the truth about the two leading types of English. At present American teachers too often base their idea of British pronunciation and usage on the dialect stories they have heard; British teachers are much too inclined to label as "American" almost any element of English which they regard as aberrant. We need to replace hearsay and spiteful innuendo by objective facts. It is time that we realized that bullheaded faithfulness to one brand of English is no virtue. One of the chief values of English to, say, an African is that it is spoken by such a tremendous number of people in so many different countries; we do that African no favor if we deliberately try to restrict him to one variety of the language.

Admittedly, collaboration with the French is being made difficult these days by the policies of a certain well-known political leader. But even DeGaulle cannot change the fact that English and French are natural allies throughout much of the world. An improvement in the teaching of one foreign language in a given school system usually results in an improvement in instruction in all other languages offered in that system. A language laboratory, whether installed under the French or American aid programs, is likely to wind up being used for both French and English. The leading French authorities on language teaching are under a strong American influence at present, but they are producing some of the best instructional materials to be found anywhere, and the influence is beginning to flow back across the Atlantic. We have much more to gain than to lose by close cooperation with the French.

And what of the tensions between proponents of English and those nationalist educators who would prefer to see all instruction given in an indigenous language such as Swahili, Twi, or Sinhalese? It appears that such tensions mark an inevitable phase in the educational and linguistic development of most newly independent nations. On the one side there are the forces of nationalism to which we have already referred: the conviction that any country worthy of the name must have its own language and make it serve as the medium in all important aspects of national life, the belief that a society can achieve its full creative potential only through expression in a prestigious mother tongue. The case of the nationalists is buttressed by strong psychological arguments stressing the dangerous effects of bilingualism on the individual personality. Working in the opposite direction are forces which may be labeled universal: the difficulty of finding or creating adequate teaching materials in minor tongues; the fact that a monolingual education in the great majority of the world's languages would open no doors to intellectual, social, or professional advancement.

Most countries, at the moment of achieving their independence, found the scales tipped in favor of English or French in their educational systems. It should surprise none of us that the balance had to be readjusted and a new linguistic policy be worked out for the schools. In several parts of the world—the Philippines, Ceylon, perhaps India and Pakistan—the readjustment seems to have been largely completed. A new recipe for mixing English, the national languages, and local vernaculars in the educational system has been developed. If the opposing forces identified above are not fully satisfied, at least they have achieved a fragile equilibrium. But in many systems the readjustment is still going on.

We Americans interested in teaching English overseas must realize that our role is more complex and demanding than simply to act as champion of more and better English at any price. We must try to view the linguistic problem in the schools as a whole and be willing to devote such technical skill and knowledge as we may have to helping in the search for a general solution. Certainly the ideal solution will not be the same from one country to another; the precise mixture of languages to be taught will depend on a great many factors too numerous for listing here. In a given situation we may even find ourselves backing more vernacular instruction at the apparent expense of English—and possibly to the horror of the local American Cultural Attaché.

Of course, better teaching of the vernaculars and a fuller knowledge of their structure may, in practice, be one of the best ways of improving English instruction. There is no need to point out to this audience that the more we know about the nature of the mother tongue of our students, the more effectively we can guide them in overcoming their difficulties in learning English. Furthermore, recent efforts to identify the universals of language have renewed our hope that there are certain abilities, knowledge, and attitudes which affect the learning of all languages. In other words, it may be possible by careful and deliberate planning to organize instruction in the mother tongue in such a way as to greatly facilitate the learning of a second language. An attempt will be made in the near future to do this for Swahili and English in Tanzania; it is certain to be watched with great interest.

There is, then, no *necessary* and *permanent* conflict between English and any other language. If we English teachers do our work well, we can go about our profession anywhere in the world, with confidence that we are making a contribution to the welfare of mankind, and without allowing a single conscience pang to accuse us of neocolonialism.

OPPORTUNITIES FOR SERVICE IN PROGRAMS SPONSORED BY NONGOVERNMENT INSTITUTIONS

J Milton Cowan

I take it that the imposing title of this program, *Opportunities for Service in the Teaching of English to Speakers of Other Languages,* can be paraphrased into the question, "What's the job potential?" In addressing myself to one limited segment of this topic I must start with a confession. Way back in the early prehistory of interest in this subject I was foolish enough to make a prediction. The date was 1957 and the occasion, a conference in Ann Arbor on Linguistics and the Teaching of English as a Foreign Language. I said:

> We should be clear about one point. America is not going to supply professional teachers of English to meet the world demand for such instruction. Americans don't like to stay away from home very long, for one thing. The teaching of English as a foreign language is not likely ever to be a profession for very many Americans. There are a few positions at universities which provide help to foreign students on their campuses. But the teaching of English as a foreign language can be made a very useful apprenticeship for a young person working ultimately toward an academic career in any of the humanistic disciplines, or in business—or even, for that matter, in linguistics.[1]

Confronted with the enormous range of professional interest at this second annual conference, I am forced to see that I was unduly narrow and pessimistic way back when. I had already become aware of this at the Tucson conference last year and could take some comfort in the fact that the upsurge in interest was sufficiently novel to require considerable explanation to the lay public. TESOL, TESL, TEFL, NAFSA, NCTE, TOEFL, NACTEFL were very popular abbreviations in Tucson. After I had done my best to explain to an inquisitive cab driver what it was all about, he said, "Hmm. Might not be a bad idea to introduce English as a first language in our schools."

We have agreed to divide up the various kinds of opportunities for service, and I'm to tell you something about those in programs sponsored by nongovernment institutions. That means by non-U. S. government institutions. It will turn out that the hand of our government will be discernible here and there, but not as the prime mover. As a matter of fact, the world demand for help in teaching English is so great that it can be met only by expenditures of money such as governments and large foundations have at their command. The true "sponsors" in a basic sense are our foundations, such as the Ford and Rockefeller Foundations, which have taken an interest in the problem, as well as our own government and foreign governments.

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[1] See *Language Learning,* Special Issue I (June 1958), 117.

Let us look first at some foreign operations and see how they work. I didn't realize how complicated some of the relations are until I made ready to describe them to you. Take for instance the program in Italy which was started under the Fulbright program about ten years ago and which, with Ford Foundation support, has been under the guidance of Cornell University for the past three years. It has grown until it has involved the Italian Ministry of Education in the retraining of 1800 Italian teachers of English in the technical institutes. It involves the training of teacher trainees and future administrators at the University of Rome, in Great Britain, and in the U. S. It requires demonstration classes as a proving ground for the design and testing of teaching materials and English tests. In Rome this turns out to be a highly successful and self-sustaining adult educational venture. Groups of Italian teachers have been sent to the States during the summer months for further training. And this year for the first time a feature has been introduced which, if widely imitated, could easily double or treble the number of Americans in English teaching overseas in short order. Taking a leaf from the book of linguists who during the war years introduced native speakers as assistants into the classroom procedures, we have been assigning college graduates as native speaking assistants to work with Italian teachers in rural areas. The opportunities for Americans? All in all there are between eight and a dozen professional teachers and between forty and sixty short-termers a year supported variously by Ford Foundation-Cornell and the U. S. and Italian governments in this one operation alone.

Another complicated operation is that conducted by a consortium consisting of Brown, Cornell, and Texas Universities and funded by the Rockefeller and Ford Foundations and the United States and United Arab Republic governments. Its aim is nothing short of a revolution in the teaching of English and other modern languages throughout the U.A.R. It involves activities on both sides of the Atlantic, and it is difficult to guess how many Americans it may ultimately involve if the political climate is favorable to its growth.

A complete list of overseas activities in the teaching of English in which American universities are engaged would indeed be impressive—Texas in Taiwan, UCLA in the Philippines and Tanzania, Southern Illinois University in Nigeria, State University of New York in Indonesia, Columbia Teachers College in Afghanistan and India, and Georgetown in Spain, to name only a few examples. There is every indication that the list will continue to grow. There are some operations stimulated, organized, or conducted by personnel from various universities without any direct institutional affiliation. I have in mind such projects as the English Language Educational Commission in Japan which has benefited from the professional advice of a large number of distinguished American linguists. It was originally started by Japanese businessmen who were aware of a desperate need for expanding English teaching, especially spoken English, in Japan. It has also had support from the Rockefeller interests and the Ford Foundation.

It is characteristic of the activities of the type I have mentioned thus far that they engage the services of a relatively small number of highly trained specialists drawn mainly from universities, many of whom do not consider the teaching of English to be their primary calling. The objective is *institution building,* that is, the training of indigenous personnel ultimately to take over and manage their own language problems. If any sizable numbers of Americans get involved, it is typically only for a short time and at relatively low professional levels.

We pass now to other kinds of overseas activity. There are opportunities in many private schools. The Near East College Association which recruits for schools in Greece, Lebanon, and Turkey has an interesting word about English for prospective teachers: "The greatest demand is for teachers of English, the sciences, and mathematics. It should be emphasized that most of the positions in English require special training and/or experience in Teaching English as a Foreign Language and this training is always helpful for English teachers."

Also in industry there are openings. Oil companies, mining interests, fruit producers, rubber companies, and others are involved to varying degrees. The Arabian American Oil Company considered bilinguality of sufficient importance to prepare and publish extensive course materials to aid its employees in learning English, and it provides instruction in English on company time.

Among others, English Language Services, Inc., provides professional services around the world in this field. I quote here from a neat and condensed statement indicating the range of their activities which they very kindly supplied at my request:

> Historically speaking, ELS has conducted TEFL programs of one sort or another in 40 different countries. The majority of these have been in the Middle East and Africa on both sides of the Sahara, but we have also developed projects in Latin America and the Far East.
>
> At this writing (February 1965), ELS has a total of 35 staff teacher personnel assigned to 12 different programs in 9 countries overseas. Here in the United States, 5 permanent staff teacher personnel are assigned to the two ELS Language Centers in Washington, D. C., and Southern Illinois University in Carbondale, Illinois. Both here and abroad a number of locally hired employees are also employed on a part-time basis.

Finally, there are the free-lancers. It is safe to say that any adventurous soul who is willing to become an expatriate and adapt to the local customs and living standard can find a livelihood supported by English teaching in Asia, Africa, or Latin America, in fact almost any place in the world. The demand for English is usually so great that no professional qualification is necessary to get by.

Let us now turn to the domestic situation, again from the nongovernment point of view, understanding, of course, that government support may well be behind a domestic university program. We have already seen that a strict separation between domestic and overseas operations cannot be made. Generally speaking, the institutions involved in overseas development carry out certain phases of these developments on their home campuses. For example, Brown University has an impressive program leading to the M.A. in English as a Second Language for headmasters, inspectors, and ministry officials from the

U.A.R., and this ties in intimately with the overseas program which I have already mentioned.

There are many special programs conducted for English teachers from foreign countries at our universities in the summer and some which extend throughout the academic year. That the importance of the subject can override political chilliness and suspicion is attested by the fact that we have for the past two summers conducted special programs at Cornell for twenty-seven teachers of English from the Soviet Union.

Also there are intensive English courses for people coming to the States on technical and educational missions. Many of these visitors are not assumed to know very much English when they come and are unable to get on with their business here until they are able to communicate in the language of the land. I have in mind here the kind of intensive English program which we run at my university for agricultural specialists who are brought here from all parts of the world, who will be here studying their specialties for a year or more, and who frequently are poorly equipped to communicate with their American counterparts.

Then there are those 85,000 foreign students in our midst, many of whom require a good deal of remedial English to get on with the job, despite the fact that they were supposed to have demonstrated adequate facility in English before coming here.

It is difficult to ascertain how many of our people are engaged in these educational activities and at what levels. The number certainly must be increasing because the numbers of programs that come to our attention are increasing. There is no evidence yet that any of our large-scale efforts to improve the English of foreign students before they come here are successful enough to reduce the remedial job that needs to be done here, although we can reasonably assume that this will be less and less of a problem as time goes on.

To sum up then, as I see it there is an expanding need for English teachers overseas in programs sponsored by nongovernment institutions. The numbers likely to be involved are nowhere near as large as they are for similar government-sponsored programs such as the Peace Corps. Most of the jobs are for a short term, and, to be quite honest, the pay is not always enticing and living conditions are often strange judged by home standards. But the work is interesting, even exciting. One gets a valuable insight into a different way of life and, most rewarding of all, has a sense of being identified with a useful and purposeful activity.

When we look at the situation with regard to career posts in the teaching of English as a second or foreign language in the universities, the picture is not so rosy. I do not foresee great expansion and specialization. We are faced with a curious anomaly here. Very few of the people who get into the practice of teaching English as a second or foreign language are able to go on to higher levels and make a professional career of it. This does not mean that their experience is lost. It is useful background for specialization in other academic disciplines such as foreign languages, linguistics, English, journalism, and creative writing.

It may well be that the forces in effect behind the Tucson and San Diego conferences will sweep aside the anomaly and establish beyond question a new profession in American academic life. Who knows? When I first started in linguistics thirty years ago, nobody in his wildest fancy would have been able to foresee the range of activities that a linguist engages in today or the urgent demand for his services. It can happen again with this field of interest!

OPPORTUNITIES FOR SERVICE OFFERED BY GOVERNMENT AGENCIES

Trusten W. Russell

In the January 1964 issue of *College English* Albert H. Marckwardt of Princeton University outlines the challenging task of teaching English to nonnative speakers which confronts American linguists: "A number of factors," he says, "have combined to make it one of our important cultural activities abroad and a crucial educational necessity at home. Currently no less than seven major agencies or departments of the government are engaged in it, and the shortage of qualified personnel is nothing short of appalling. There are not, in fact, even enough institutions offering training programs for teachers of English as a foreign language to keep up with the demand."

I have been asked to describe the programs for teaching English to nonnative speakers now being carried on by the government agencies which Professor Marckwardt refers to and to estimate the volume of demand for trained specialists in teaching English as a second or foreign language which these programs have created. I have been asked to limit my comments to those opportunities which are offered on a direct-hire basis and not to include those which are available under projects administered by contract agencies.

The United States Information Agency

One of the largest and historically one of the oldest government English teaching programs is carried on by the English Teaching Division of the U. S. Information Agency. USIA conducts English programs in some 150 binational centers which are located in most of the principal cities of Latin America as well as in twelve cities of the Near East, ten cities of the Far East, and a few European cities. About 250,000 tuition-paying students are enrolled in these schools at the present moment. By definition, a binational center is a private, autonomous organization governed by a board of directors which carries on activities designed to foster better understanding between the people of the host country and the United States. USIA helps to establish the centers and assists them in carrying on various activities including English language schools which USIA itself staffs and directs. Formerly USIA recruited American teachers for these schools, but the teacher-grant program has been phased out, and classroom teachers are now hired locally. USIA still provides supervisory personnel for the centers. These supervisory positions offer attractive opportunities for high school and college language teachers to acquire teaching experience and overseas knowledge. In addition to salary USIA pays for the transportation of families and belongings overseas. After several years of experience overseas, some of the staff return to their former positions in U. S. schools and colleges. Others continue to hold their foreign posts through successive appointments. Still others enter the regular Foreign Service and may advance through merit to become ambassadors or Department of State officers. Jack H. Vaughn, Assistant Secretary of State for Latin American Affairs, began his career as a teacher in a Latin American binational center.

Additional USIA activities are carried out in Washington. There is a Materials Development Section which publishes the *English Teaching Forum,* a practical periodical for teachers of English distributed free overseas, and special materials such as the illustrated life of President Kennedy and the life of Robert Frost, which include a vocabulary, discussion questions, and drills for classroom use.

Acting with an advisory committee of eight linguists headed by Harold B. Allen, USIA also contracts for certain services such as the production of a series of six textbooks entitled *English for Today,* which most of you are familiar with. The contractor, in this instance, was the National Council of Teachers of English. USIA has also contracted for a series of twenty-five broadcasts on various aspects of applied linguistics, a project which Archibald A. Hill of the University of Texas will coordinate.

The Defense Language Institute

The Defense Language Institute is the division of the Department of Defense responsible for all language training programs carried on by the military services. DLI teaches English to foreign military personnel in schools located both overseas and in the United States, and it also operates the Defense Language Institute-West Coast Branch in Monterey, California, and the Defense Language Institute-East Coast Branch in Washington, D. C., for teaching foreign languages to American military personnel. Let me describe briefly the foreign and domestic DLI programs for teaching English to foreign military personnel.

Whenever the United States sells, leases, or gives grant-aid of military or other supplies, such as hospital equipment, to a foreign country, it must provide a training program for the utilization and maintenance of these materials. Since the training program is in English, DLI must also provide English language instruction. For this purpose it has established English language schools in forty-eight foreign countries, sometimes three or four to a country, in which intensive four- to six-month courses are presently being offered to about 100,000 students each year. For the organization and staffing of a few of the overseas schools, DLI contracts with commercial firms such as English Language Services or the Institute of Modern Languages in Washington, D. C. Generally, host country personnel trained in the U. S. run these programs with MAAG, Mission, or Attaché supervision.

In this country the Department of Defense has its USAF Language School for foreign personnel at Lackland Air Force Base at San Antonio, Texas, with an enrollment of about 1,000 and a permanent faculty of 90. The USAF Language School provides a full-year course for specialized foreign students, many of whom become instructors when they return to their own countries. The teachers at Lackland are civilians who receive college-level salaries. I should mention that the DLI teaching staff has developed a notable six-segment course of teaching materials which takes a student from first attempts at accurate pronunciation to a high level of fluency.

At the request of Secretary McNamara, the Director of DLI and his colleagues have recently completed an exhaustive report on the status of the programs at Lackland and overseas. The report recommends (a) a revision of teaching materials; (b) a more extensive use of audiolingual teaching aids; and (c) higher teacher qualifications. The report also recommends that the DLI testing materials, when revised, should be updated frequently.

In summary, the DLI employs about 200 teachers of English as a foreign language: 100 as consultants overseas, and 90 at Lackland Air Force Base. Minimal teacher qualifications are a master's degree in applied linguistics, or its equivalent, and several years of experience teaching English as a foreign language.

Peace Corps

The Peace Corps carries on an enormous program of English teaching, but the direct-hire training and direct-hire supervisory staff is small. Peace Corps officials believe that teaching English is one of the best ways to achieve cultural understanding, and they point out that almost all of the 8,000 Peace Corps volunteers are teaching English part time or full time either on a formal or informal basis. Instruction in TEFL methodology is an important part of the three months of training which volunteers receive before they leave the United States. The average is about 100 hours of instruction including practice teaching.

Within the Peace Corps Division of University Relations and Training, the position of TEFL Coordinator has recently been established. The TEFL Coordinator is charged with the responsibility of establishing training guidelines in this area, working closely with universities and Peace Corps training sites in organizing and conducting programs for both TEFL specialists and nonspecialists. In addition the Coordinator, assisted by consultant personnel, conducts research and organizes inservice training programs. The great need for TEFL specialists, however, is in the universities which train Peace Corps volunteers. Therefore, another responsibility of the Peace Corps TEFL Coordinator is to help these universities find good candidates as well as to assist in recruiting English teaching specialists to serve the universities as overseas supervisors. These "contract overseas representatives," as they are called, are hired for two-year periods. They must be critic-teachers, able to handle administrative and classroom problems, evaluate course materials, and supervise and conduct teacher seminars. Many Peace Corps alumni, I was told, are preparing to become professional teachers of English as a foreign language because they have realized for the first time that English is not just a subject in the curriculum but a very important means of international communication.

Bureau of Indian Affairs

Within the Department of the Interior, the Bureau of Indian Affairs has responsibility for operating 264 federal schools, 27 of them on the high school level, for almost 50,000 Indian students. The schools are in areas where no organized state school systems exist. Almost all students enter school with no knowledge of English, and the first year is devoted exclusively to learning

English. You can imagine the challenge of teaching English in an elementary school near Phoenix, where the pupils speak fifty-seven different tribal dialects. The Bureau of Indian Affairs hires about 200 teachers annually and, since almost all teachers in the schools teach English at least part of the time, the Bureau gives preference to teacher candidates who have had training and experience in teaching English as a second language. Teachers are employed on a twelve-month basis; they spend the months between sessions in special training courses, often at NDEA institutes. The Bureau has an advisory staff of linguists who evaluate teaching materials and develop new texts and teaching methods.

Agency for International Development

The Agency for International Development, since it is a program of technological assistance, has given relatively low priority to teaching English. There have been, as we all know, important English teaching programs which AID has contracted for with universities: Columbia University in Afghanistan, Texas in Taiwan, Michigan in Thailand, Laos, and Viet Nam, for example. But these have been few, and most of them have now been discontinued. When AID begins a program of technical assistance in a country where English is not the predominant language, it ordinarily turns to the USIS, the Peace Corps, or some other government agency for help. In Saigon and Bangkok, for example, the national participants in AID programs learn English in the binational center schools of the USIA, where special courses are arranged. For some years AID employed eight to ten English teaching consultants, but this staff has been cut back.

Fulbright Teacher Grants

Under the Fulbright exchange program the Office of Education of the Department of Health, Education, and Welfare administers a program of about seventy grants a year for American high school teachers to teach English in the public and private secondary schools of about twenty-two foreign countries. These Fulbright teacher grants carry stipends in foreign currency adequate to meet the living expenses of the teachers and their families while they are in residence abroad. The grants also provide round-trip passage for the teachers themselves, but not for their dependents. Minimal requirements for applicants are a bachelor's degree, three years of teaching experience, and a state English teaching certificate. Grantees who have had no training in applied linguistics or methods of teaching English as a foreign language and who are going to Latin American, Middle Eastern, or Far Eastern countries, where such training is particularly useful, are given a six-week cram seminar in applied linguistics and teaching methods during the summer before their departure. These seminars have ordinarily been held at the University of Michigan or at Georgetown University.

Fulbright Professor Grants

Under the professor-level Fulbright program there are forty to fifty grants offered each year in the field of linguistics and the teaching of English as a foreign language. Of these, four or five are for postdoctoral research or lecturing at foreign universities, for research in dialectology at the University of Marburg, for example, or for lecturing in Slavic linguistics at the University of Copenhagen. The rest of the grants, about forty-five each year, are in the field of teaching English as a foreign language. There are often multiple awards offered in a single country. These represent requests which are jointly formulated by several universities in conjunction with the Ministry of Education of the participating country. In Spain, for instance, the Ministry of Education two years ago decided to expand and improve the teaching of English in the Spanish secondary schools. The Director-General for secondary schools, in planning this expansion, estimated that 400 teachers of English would have to be trained in the universities within a few years. To help solve this training problem, the binational Fulbright Commission in Madrid was asked to provide one senior American linguist to supervise and coordinate the Fulbright effort, and six specialists to teach English as a foreign language in six of the universities. These seven awards will continue to be offered each year over a period of perhaps five years. They are announced one year in advance in a special bulletin which describes all professor-level Fulbright awards in linguistics and TEFL. Similar programs have been carried on in the United Arab Republic, Italy, and the Philippines. In 1963 a country-wide project in Greece was launched with a Fulbright professor designated as coordinator and with fifteen Fulbright high school teachers assigned to the secondary schools and to the teacher training colleges attached to the Universities of Athens and Thessaloniki.

Fulbright Grants for Graduate Students

Most of the 1200 Fulbright grants available to graduate students under the program administered by the Institute of International Education are for research at foreign universities. There are, however, forty awards under the program with India and eight to ten under the program with Italy for graduate students to serve as assistants in the English departments of universities of those countries. Preference is given to candidates who have majored in American literature and civilization and in English language and linguistics.

I would estimate, by way of summary, that the annual direct-hire demand of the government programs I have described is well in excess of 300 linguists a year. One of the larger TEFL operations is the Peace Corps, yet this program does not figure in my estimate, since linguists are employed by the universities which hold contracts and are therefore outside my survey. As for the qualifications required of linguists whom the government programs hire, there seems to be general agreement that a classroom teacher should have a master's degree in applied linguistics and three years' experience teaching English as a foreign language. These requirements are sometimes "flexible," since candidates are in such short supply, but this situation is said to have improved a little in the past two years. For senior and administrative posts, there is emphasis on a more advanced knowledge of structural linguistics and experience in developing teaching materials, in programing laboratory work, and in organizing and conducting seminars for teachers.

If you wish additional information about the government programs, you need only write to the government agencies named and add "Washington, D. C." The Fulbright programs for graduate students and for professors are administered by nongovernment agencies; for information about professor grants, you should apply to Linguistics and TEFL, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington, D. C. 20418; for information concerning graduate student awards, apply to the Institute of International Education, 809 United Nations Plaza, New York, N. Y. 10018.

OPPORTUNITIES FOR SERVICE IN STATE EDUCATIONAL SYSTEMS

James E. Alatis

"It has been estimated that, by 2000 A.D., there will be two million persons engaged in teaching English to non-native speakers of the language!" This statement appears parenthetically in Robert A. Hall's new book *Introductory Linguistics* (Philadelphia: Chilton Books, 1964, p. 455), which I recommend to all practicing and prospective teachers of English as a second language. Of particular interest to the purposes of this paper, however, is the question: "How many of these persons will be engaged in teaching English to non-native speakers in state educational systems in this country?"

The number of opportunities for service in this field is, of course, directly proportional to the number of students in the U. S. who need special instruction in English as a second language. Unfortunately, information about the teaching of English to non-native speakers in this country is painfully inadequate and frequently inaccurate.[1]

We will probably not have an accurate picture of the magnitude of the problem until we have the results of the Comprehensive Survey of the Teaching of English to Non-English Speakers in the U. S. (with a Subsequent Conference for Determining Areas and Means of Cooperation and Development) which is being conducted by Harold B. Allen, Professor of English, University of Minnesota, under the Cooperative Research Program of the United States Office of Education. In what follows, however, I will attempt to supply new information both with regard to numbers of non-native and non-English speaking persons, as well as new government programs which offer training, supervision, and other support for the purpose of solving this growing national problem.

Here in California, the number of children who speak a foreign language as their mother tongue is increasing. An estimate based on 1960 census figures indicates that from 11,000 to 15,000 children of school age in California are the children of Mexican immigrants who have lived in this country less than four years.

A factor contributing to the increase in the number of Spanish speaking pupils in California's schools is a change in employment practices, especially noted in the Imperial Valley. Since the termination of the *bracero* program, ranchers have signed for immigrants from Mexico to work in their crops. These are often family groups, and they come with the purpose of becoming permanent residents. All have problems of learning to understand and use English effectively, of becoming competent workers in a changing economy, and of carrying on the responsibilities of citizenship in a new culture.

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[1] For some figures see National Council of Teachers of English, *The National Interest and the Teaching of English*, and the supplement, *The National Interest and the Teaching of English as a Second Language* (Champaign, Ill., 1961); Center for Applied Linguistics, *American Activities 1963* and *American Activities 1964* (Washington, D. C.).

A large proportion of the young people in California who drop out of school before completing high school have names of Spanish origin. In Los Angeles, the city which, with the exception of Mexico City, has the greatest number of "Mexican" inhabitants, only 26 percent of the students with Spanish surnames complete high school. Statistics in other Southwestern cities are even less favorable to the Spanish-surname group. In Phoenix, only 12 percent finish high school; in Tucson, 18 percent; in Pueblo, Colorado, 15 percent; in Albuquerque, 25 percent; in El Paso, 17 percent; in San Antonio, 13 percent. All of the above mentioned cities have a high proportion of Mexican-American inhabitants.

The city of New York has large representations of more than thirty nationality groups, many of whose children are learning English as a second language in the public schools. In October 1963 there were approximately 179,223 pupils of Puerto Rican background alone. The New York City Board of Education reports a total enrollment of 87,169 "language handicapped," i.e., non-English speaking, children in the 1963-64 school year. The teaching of English to non-English speaking students both in the public schools and in adult education programs continues, therefore, to be a major problem in New York City.

Recent figures from the Bureau of Vital Statistics indicate that Dade County, Florida, has a population of over 1,078,000 persons, approximately 100,000 of whom are Cuban refugees. In the autumn of 1962 the Ford Foundation made a grant of $278,000 to the Dade County Public Schools to be used in the development of instructional materials and concomitant activities for non-English speaking pupils.

Population changes in northern New Jersey are proceeding rapidly in both suburban and urban communities. Teachers whose only experience has been with children from middle class, English speaking backgrounds are increasingly being called upon to deal effectively with the problems generated by growing numbers of children from poverty-stricken, Spanish speaking families. The need for teachers to cope with this situation is acute in several New Jersey cities.

The federal government has given official recognition to the fact that English is not the mother tongue of a growing number of students in elementary and secondary schools and that this lack of competence is creating major social and economic problems for the nation as a whole. An amendment to the National Defense Education Act was approved in December 1963 by President Johnson and resulted in the launching of two summer institutes supported by the U. S. Office of Education for 110 elementary and secondary school teachers and supervisors for advanced training in teaching English as a second language in the U. S. public school system. Participants in both institutes received training in applied linguistics, in new methods of teaching English as a second language, and in Spanish and English—Spanish for teachers who did not speak it but had pupils who did, and English for Spanish speaking teachers whose pupils needed to learn English.

Emphasis at the institutes, one at the University of California at Los Angeles and one at the University of Puerto Rico, Rio Piedras, was placed on conveying understanding and appreciation of the problems pupils experience in the process of adjusting their attitudes and behavior to conform with an unfamiliar culture. Demonstration classes were also provided at appropriate levels to give ample opportunity for supervised practice teaching by the trainees.

In the summer of 1965 four institutes for teachers of English as a foreign language will be held: at the University of Arizona; at the City University of New York, Brooklyn College; at Columbia University, Teachers College; and at the University of Puerto Rico.

Also as a result of legislation enacted by the last Congress, one of the first antipoverty grants awarded by the new Office of Economic Opportunity went to an Indian reservation in central Arizona for the teaching of English to school children of the Papago tribe.

In October 1964, Congress further amended the National Defense Education Act by extending it to June 30, 1968. At the same time it repealed Section 611, the Foreign Language Institutes section, and enacted an entirely new institutes title (Title XI) in its stead. This new title includes authorization for the institute programs previously conducted under Title VI-B (FL and ESL Institutes) and also greatly extends the area of the overall program by authorizing federal support of seven new types of institutes. Under the new program, teachers and supervisors of English, reading, history, geography and of disadvantaged youth, as well as school library personnel and educational media specialists, are eligible to attend. The institutes will be conducted at colleges and universities in the fifty states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam, at an estimated cost of $22,270,000. The institutes are designed to improve participants' knowledge of subject matter and to increase their competency in the use of new materials. All participants will receive stipends of $75 per week plus $15 a week for each eligible dependent.

The new institute program was developed in approximately 100 days. On October 16, 1964, President Johnson signed the National Defense Education Act Amendments 1964 which authorized the seven new types of institutes for advanced study. Twelve days later, the Office of Education invited all institutions of higher education to submit institute proposals by December 30. Panels of scholars and specialists in the various fields met in January to review and evaluate the nearly 1,000 proposals that had been received. By letter dated February 5, 1965, the U. S. Office of Education notified the institutions of its interest in negotiating contracts for operating the institutes. More than 16,000 teachers and specialists in public and nonpublic elementary and secondary schools will undertake advanced study under this program at 410 new institutes.

Of particular interest to this audience are the institutes for English and for disadvantaged youth, many of which contain a strong English-as-a-second-language component.[2] It is expected that some of these institutes will give training in the use of English-as-a-second-language teaching techniques for the teaching of standard English to nonstandard speakers.

Title III of the National Defense Education Act of 1958 authorized matching grants of federal funds to the states and loans to nonprofit private schools to help equip and remodel laboratories and classrooms, and other grants to assist the states in expanding and improving their supervisory and related services in science, mathematics, and modern foreign languages. In 1964, five additional subjects—history, civics, geography, English, and reading—were included in Title III by Public Law 88–665, National Defense Education Act Amendments 1964. "English" has been defined to mean the study of the English language in its spoken and written forms regardless of the primary language of the student, and training and practice in the communication skills of listening, speaking, reading, and writing; it includes speech, grammar, literature, language arts, and linguistics. Thus, funds are now available to the states for strengthening instruction in English as a second language through (1) the acquisition of laboratory and other special equipment and materials, including minor remodeling, and (2) state supervisory and related services to improve the teaching of English as a second language in public elementary and secondary schools.

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[2] See *NDEA Institutes for Advanced Study*, Summer 1965 (Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1965).

The interest of the federal government in the teaching of English to speakers of other languages is further indicated by the financial support it is giving to various cooperative research projects administered by the Basic Research Branch of the U. S. Office of Education.[3]

State and local boards of education are launching training courses for their teachers, concentrating on the teaching of English as a second language and on audiolingual teaching methods. Both public and private agencies are beginning to earmark funds to develop linguistically based instructional materials. And in just the last few years a series of conferences, such as this one, has been held to stimulate interest and activity in the teaching of English as a second language.

As a result of this large expansion of activity by the federal government, the states, and the foundations, the demand for properly trained personnel has become acute. A superintendent of schools in California told me just two weeks ago that he alone could use forty teachers trained in teaching English as a second language in his county of 57,000 pupils. The success of all these programs depends in considerable measure on the preparation of competent, well-trained teachers of English as a second language. Especially crucial for such teachers is their preparation in the application of linguistics to language teaching problems. The Committee on Language Programs of the American Council of Learned Societies identifies five important contributions of linguistics to the teaching of a second language: (1) the scientific analysis of the language to be taught; (2) the study of the contrasts between the learner's native language and the language being learned; (3) the study of the physiology of the sound production in the context of the significant features of the language; (4) the study of the writing system and its relation to the spoken language; and (5) the study of the general nature of language. Albert H. Marckwardt has said repeatedly that the teaching of English as a foreign language involves primarily a linguistically oriented approach. It is accepted, Dr. Marckwardt has said, that the minimum ingredients of a teacher training program are courses in the structure of English, introductory linguistics, and methods and materials for teaching English as a second language. Such a program is offered in all the NDEA English-as-a-Foreign-Language institutes and in many of the new NDEA institutes for English and for disadvantaged youth. If an elementary or secondary school teacher is willing to undergo even such a minimal program, it is likely that he can enhance his own career and perform an important public service at the same time. As I have attempted to show, the need for such teachers is great; the opportunities for service and training are many. The special institutes on language study under the NDEA as Amended 1964 offer a dramatic opportunity for extending the nation's supply of qualified teachers of English to speakers of other languages.

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[3] See *American Activities 1964* (Washington, D. C.: Center for Applied Linguistics, 1965).

II. Reports on Special Programs

Hildegard Thompson
Culture: The Content of Language

Afton Dill Nance
Teaching English to Speakers of Other Languages: Problems in California

Dora Pantell
Public School Inservice Training in the Teaching of English as a Second Language to Adults

Pauline Rojas
The Miami Experience in Bilingual Education

Ralph F. Robinett
Constructing a Developmental Reading Program for Children Who Speak Other Languages: Some Basic Criteria

Byrl E. Robinson
The Noncompulsory Student Learns English

Elizabeth Ott
Organizing Content for the Bilingual Child

Shirley Hill
The Teaching of Mathematics in Africa Through the Medium of English

Mary Finocchiaro
The Challenge of Overseas Seminars

CULTURE: THE CONTENT OF LANGUAGE

Hildegard Thompson

Introduction

The material presented in this paper deals with the interrelationships of culture and language in school situations where English, the language of instruction, must be acquired by learners as a second language. The teaching and learning problems in situations where the language of the home differs from the language of the school are indeed complex. Except for those who have been forced to seek their own solutions through trial and error, little attention in comparison to the scope of the problem has been given to this complex teaching situation until rather recently. Now that a national spotlight is being turned on second-language teaching, more assistance will become available, no doubt, to those who teach American school children to speak the English language after they start to school.

As you well know, many thousands of children unable to speak English enter classrooms every year in this country. The educational achievement of these children, and to a great extent their future, is dependent on the development of English language capability; but English language capability, in my opinion, cannot be adequately developed unless culture and language are treated as inseparable components of the teaching-learning process.

Cultural Definition of Language

The way of life into which an individual is born provides the cultural mold which forms his beliefs and values, influences the way he feels and acts, and endows him with a language system which determines the way he speaks.

Culture largely determines how an individual views his world. It influences the way he thinks and how he expresses his thoughts. Language is the expression of culture; thus one cannot acquire fluency in language without acquiring some understanding of the culture which that language expresses.

Language is both the property of the group and the property of the individual. Language as group property sets the group apart from other groups and provides the medium for transmission of group beliefs, traditions, and values. Language becomes the personal property of the individual when he has learned it and can use it to communicate his thoughts and feelings to other individuals.

There is nothing more personal than one's language, or his culture. Any attempt from the outside to destroy either his language or his culture strikes deep at the inner core of personality. Differences in culture and language tend to obstruct cross-cultural communication. We have a tendency to view the behavior and beliefs of others in terms of our own. This is a serious error, especially for those who are concerned with the education of cultural groups other than their own. May I illustrate this point with the experience of a home economics teacher who a quarter of a century ago fell into the trap of viewing beliefs of others through her own cultural eyes.

> It was April. The school term was drawing to a close, and the teacher was concerned with using all of the home economics food supplies before the close of school. She instructed the girls to use the leftover cornmeal that they had ground earlier in the year from blue corn. The girls protested the impropriety of using blue cornmeal late in the spring. When the teacher insisted upon knowing why they couldn't use it, the girls patiently explained that using blue cornmeal in April would cause it to snow; that snow late in the spring would kill the newborn lambs. The teacher passed off this line of reasoning as silly superstition and made the girls use the meal, which they did with reluctance that approached sullenness. The teacher was greeted the next morning with a snow-covered landscape and a group of girls who communicated quite effectively their attitude of "we told you so" without using a single word of English.

That teacher, I'm sure, learned an unforgettable lesson—a lesson all teachers of the culturally different should know and know well; namely, that they should see each student through the cultural eyes of the student, not their own; otherwise they may inflict telling blows on the inner core of the student's personality. In my opinion, therefore, cultural empathy should be a major qualification of all teachers who work with the culturally different.

In our culture it is customary to ask a stranger's name if we wish to make his acquaintance. In certain Indian cultures such a question would have been impolite, and to some extent among some of the older Indians is still considered so. With some tribes the individual was not supposed to speak even his own name. Instead of asking a stranger his name, certain Indians customarily established identity by asking, "What's your clan?" Where this custom still prevails, you can readily see the cultural interference that would result from the pattern drill, "What's your name?" with the expected response, "My name's Askee Yazzie."

Teachers who teach English to speakers of other languages, even though they may know well the structure of the English language, cannot render their best service unless they are able to view the learner through his cultural eyes.

The Bureau's Educational Program

When I was introduced, you were told that I am an employee of the Bureau of Indian Affairs. All of our work in the Bureau is with the culturally different. Without going into the theory of anthropology, education, or linguistics, I should like, first, to sketch for you in broad outline the nature of our educational problems; second, to describe briefly the evolution of language teaching practices in our schools; and third, to give you an account of some of the current experiments and practices in connection with English language teaching that are being carried on in Bureau schools.

Certain aspects of life in traditional Indian groups, especially in the economic sector, no longer adequately serve Indian needs. Indians, like the rest of us but to far greater extent, are faced with making rapid adjustments—adjustments often complex and confusing to them. They are faced with learning different ways of living and learning newer ways of making a living. A good command of the English language today, more than ever before, is the master key to their successful transition to twentieth century living. To meet Indian students' present-day needs, educational programs must develop a command of spoken and written English and also must provide a heavy load of cultural content related to newer ways of living.

The problems of second-language teaching should be understood in terms of the purposes for which the language is taught. A second language is taught to accomplish one of three primary goals:

1) It is a medium of communication between two culturally different individuals who are literate in their respective languages. (This does not describe our problem in teaching English to Indians.)
2) It is a part of the educational or cultural development of an individual. (Neither does this describe our problem of language teaching.)
3) It is the language through which an individual acquires initial literacy and all of his formal education. (This is our language problem.)

Linguists, I believe, have no difficulty in recognizing the differences in these language teaching problems. Robert Lado says: "Language teaching must obviously differ for literate and illiterate students. It must also differ for various levels of education, with college and university level and the primary education level sharply distinguished."[1] Educators, also, should be aware of these sharp distinctions so that they can make the program adjustment necessary in terms of purposes to be served and the age level of the learners.

Our language teaching problem in the Bureau is distinguished by the following characteristics: Indian students must acquire literacy and usually their entire education in the English language. Their education must prepare them for living in a modern world. They enter school with rich experiences in their own culture but limited experiences beyond their own Indian community. Most of them speak one of 170 Indian dialects, but they have no knowledge of the English language when they enter school. There is little, if any, relationship between the structure of their native languages and English.

In 1964, almost half of the 50,000 students in Bureau schools were in the first four primary grades. Ten percent are older students in special ungraded classes, and the remainder are in the upper elementary and high school grades. The development of English language capability must be heavily emphasized with each group, but the teaching content and methods should be different for each. The Bureau's English language program as an integral part of the total educational program also reflects the cultural background of the Indian students and is tailored to meet their special needs. You will have no difficulty in recognizing cultural content in the following which is quoted from an English composition by a Navajo teenager with less than five years of schooling.

> Every morning seems to begin with clouds in the sky.
> This day is no different from the others.
> The snow is falling, everything is white.

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[1] R. Lado, *Language Teaching—A Scientific Approach* (New York: McGraw-Hill Book Company, 1964).

The mesas, only a little distant away, are invisible.
The wind is not a whisper like yesterday.
It is a lion roaring.
Mother is still cooking the bread in the pan over the fire.
She says that the sheep will need much food today.
On the side of the mountain away from the wind will be best.
I eat, put on my coat, and wrap my feet in rags.
I get almost to the door when mother reminds me to take a blanket.
My dog comes to my side quietly. He is cold.
We let the corral gate down. The sheep don't want to go.
We push them. We shove them. They go up the wash to the foot of the
    mountain.

. . . .

As I drive the sheep up out of the wash, I see my mother waving.
She calls for me to hurry because my supper is ready.
The fried bread smells good as I go into the hogan.
The coffee is hot and brown. It tastes good.

JONAH J. JONES

Evolution of Language Teaching Practices in Bureau Schools

The Bureau has developed its English language program over long years of experience in trying to meet the learning problems of American Indians. Methods have evolved on the basis of what proved most successful in achieving the desired goals. The first published Bureau guide that I have been able to locate was prepared in 1904 by Estelle Reel, who at that time held a position in the Bureau of Indian Affairs similar to mine.

Estelle Reel starts her 1904 guide with "Teaching the Indian child to speak English forms the basis of all experiments to educate him." She quotes a successful teacher as saying, "We aim at giving the pupils a sufficient command of English to enable them to meet the needs of everyday conversation." Another teacher is quoted as saying, "We talked busily while we worked, and every move called for language." And still another is quoted as follows: "I teach Indian children to speak and write their names, and those of their classmates, also the names of everything in the room using the words *I see* before each example—I see Alma. I see a desk, etc."

From this we can see that attention was given to oral English. How could it be otherwise when teachers were faced with groups of illiterate youth who could not speak or understand a word of English? Besides, teachers in those days were supposed to see that their charges did not speak their native language, and to punish them if they did. Although we disagree heartily with the method of force, we must admit that circumstances dictated the teaching of spoken English before the teaching of the written form.

Between 1900 and 1930 there is documentation about policy approaches to Indian administration, but little concerning the teaching of the English language, except that Indians were expected to become farmers in the midwest pattern of that day and to replace their native tongue with English.

A more humanistic approach was applied to Indian administration in the 1930's, and this newer approach was reflected in the Bureau's educational program. Linguists and anthropologists were employed; bilingual teaching materials were developed around Indian life; and the first year of the child's school life was set aside to give him a start in speaking English. Teachers were encouraged to provide activities and use everyday situations as the basis for developing meaningful English. Vocabulary lists were prepared for control purposes, but emphasis was on speaking in sentences. Teacher guides were prepared, and in-service summer schools became an annual practice.

Two years ago, the Commissioner of Indian Affairs, Mr. Nash, and the Washington Office Education staff met with certain educators and linguists to appraise the Bureau's English language program. Serious consideration was given to a problem which has plagued us for many years. At about the fourth grade, Indian children begin to fall behind the national academic norms, and the gap gets wider as they move up the grades.

Last year Tom Hopkins, Education Specialist, surveyed our approaches and practices and made comparisons with linguistic principles. This document has been helpful to us in making program determinations and adjustments. In assessing where we stand today, it is my conclusion that we, in the Bureau, are doing our best work at the primary grade levels and that our approaches and methods at these levels are sound in terms of today's thinking. Teachers, however, do need more specific guides for oral English and training to help them overcome the interference of the native language and culture in establishing English patterns, especially patterns of intonation, rhythm, and stress.

We need to give much more attention to the upper elementary grades and the high school levels and to carry oral English development sequentially through those levels. There needs to be continuing attention to the provision of experiences for the development of concepts which make language, however spoken, meaningful. To state it simply: emphasis must be given to "what" is said, as well as "how" something is said.

Experimental Programs in Bureau Schools

Four years ago, a group of teachers at our Shiprock School, under the leadership of Ruth Werner, Department Head, Primary Grades, began to experiment with the adaptation of linguistic materials as a means of strengthening their English language teaching. They prepared a rough guide for oral language teaching, and each year since they have revised this guide on the basis of their experience in using it.

Last school year Mrs. Elizabeth Willink and Wayne Holm, Principal of the Rock Point School, began similar experimentation. Mr. Holm is thoroughly familiar with Navajo life and has had training in the linguistic approach. Mrs. Willink is working closely with him and with the teachers at the Rock Point School to develop suitable teaching materials. A team of educators is working with them to evaluate and assist them in their experiments. I observed the work at both schools last week and discussed with the staff the next steps toward the development of guides and teaching materials for broader use.

We are experimenting with a high school curriculum design, geared to student needs, which places heavy emphasis on English as a second language. Through the experience gained from this pilot program, we hope to develop helpful guides and materials for use throughout our school system.

The Bureau is experimenting with language laboratories at two schools. Tape recorders, plastic discs, and records for listening and speech practice purposes have been used in Bureau schools for some time, but all new schools are now being equipped with library materials centers stocked with visual and auditory aids of all kinds for teacher and student use.

At the primary level, cultural content is provided through play materials representing both Indian and non-Indian life. Teachers use these materials as the basis for oral English development and practice. Successful teachers also use school situations such as the school lunch, dormitory living, and playground activities to develop English. I observed a teacher last week teach a very effective oral English-social studies class, and another teach oral English, again very effectively, around an actual dining room situation. One used the pattern practice approach; the other merely required the children to speak in complete sentences. Both were getting good results.

In our Mississippi Choctaw schools the music education program is used to good advantage to strengthen the English program. Some of the teachers there also are trying out Gerald Dykstra's experimental materials.

I hope I'm not leaving you with the impression that all is success in our program. Far from it. We can point with pride to hundreds of youth, twelve to sixteen years of age, who after completing a five-year program specially tailored to their needs acquired a sufficient command of English and a salable skill which led to gainful employment. On the other hand, we are concerned over students whose English is deficient. At one extreme we can point with pride to an Indian Congressman who learned English as a second language by our methods. There are many others like him equally proficient in English. At the other extreme we must apologize for our failure to develop correct English expression with many Indian students as exemplified by the Indian youth who in the excitement of a boxing match jumped to his feet and shouted to one of the boxers these instructions: "Don't just stood there; swung at him."

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES: PROBLEMS IN CALIFORNIA

Afton Dill Nance

The number of children who speak a foreign language as their mother tongue is increasing in California. Most immigrants entering California are from Mexico although an increase in those from other countries, especially from Germany, Holland, and Portugal, is reported.

Proposed changes in the immigration laws may increase the numbers of persons entering this country as well as modify the basis for their selection. As reported in the 1960 census, the number of people with Spanish surnames increased 87.6 percent in California in the decade between 1950 and 1960. There has been no decrease in numbers in the last five years; in fact it is probable that the rate is now higher. An estimate based on census figures indicates that from 11,000 to 15,000 children of school age in California are the children of Mexican immigrants who have lived in this country less than four years. Add these to the Mexican-American children whose parents and grandparents for several generations have been citizens of this state and the figures mount still higher.

On October 31, 1964, 2,606,962 girls and boys were enrolled in kindergarten through grade eight in California's elementary schools. Approximately one tenth or 260,000 of these bear Spanish surnames, and the proportion of these who do not speak English as their native language is increasing.

Immigrants from Mexico are from all socioeconomic situations, but many have had limited opportunities for education and have deficiency in their native language as well as little or no facility in English. Many are unskilled laborers who have entered California to work in the crops. Pupils enter the schools at all times during the year, and many families move from place to place in search of employment. Members of this group often have special health problems and other difficulties in adjusting to new ways of living. Parents as well as children need help and counsel from school and community agencies.

Educators in California are firmly committed both by law and by practice to placing Spanish speaking children in unsegregated situations. Where de facto segregation exists, positive efforts are being made to correct the situation. In practical terms, this means that a teacher of the fourth grade may have two or three nonspeakers of English in his group; that a kindergarten teacher may enroll six such girls and boys; that fifteen out of twenty-five children in a seventh grade will have Spanish surnames, but all levels of proficiency in English will be represented among them.

Such situations have many strengths. The children have strong motivation to learn English: they wish to talk to their friends; they want their turn at bat; they want to participate in the full range of activities which make a good elementary school a busy, joyous place in which to live. They are not separated from the other children, so learning the ways of a new culture is natural, and opportunities to practice new ways of behaving and to use a new vocabulary arise naturally in the course of the day's activities. Many girls and boys succeed in this type of school without special language training. Evidence of this fact can be found in any audience of educators in California. Many teachers and school administrators of Spanish speaking background now occupying leadership positions attended this type of school.

However, although many have succeeded, too many have failed, at least partly because they did not have the special help of a well-planned, soundly based program of instruction in English as a second language.

In many schools the practice has been to give Spanish speaking children approximately the same type of instruction as the other children, but to "give them time to catch up"—in other words to retard them for a year or more, but give little special help in learning the new language.

Summing up, the first problem of teaching English to speakers of other languages in California is that large numbers of boys and girls are involved, and the second is that helping these pupils become fully adequate participants in a new culture and proficient in a new language is a difficult and complex process. As Harold B. Dunkel has said in *Whitehead on Education*, the *1965 Yearbook of the John Dewey Society*, "Thus nature dictates that the first intellectual task which confronts the infant is the acquisition of the spoken language—an appalling task." [1]

A solution to the problem of providing the needed special instruction would appear to be at hand if legislation now pending in the California legislature is enacted. This proposed legislation would provide a five-year program, statewide, to foreign-born minors and native-born minors who have not attended schools in the United States for more than one year, and who are unable to speak, read, or write the English language to a degree of proficiency necessary to enable them to benefit from the instruction in the classes to which they are assigned. Excess expense would be limited to $50 per pupil in both elementary and secondary schools.

This proposal is the outcome of a pilot project which has been carried on for the last eighteen months in Imperial and San Diego Counties. Eight school districts have participated. They are Carlsbad, Chula Vista, San Diego City, and San Ysidro in San Diego County, and Calexico, Calipatria, Imperial, and Seeley in Imperial County. Five hundred pupils from kindergarten through grade eight are enrolled.

Instruction has been given in special classes of not more than fifteen pupils held for at least one half hour daily. The audiolingual approach to learning a new language has been used, and emphasis has been placed on increasing facility in the use of oral English. Pupils in all programs having increased their competence in spoken English now participate with more confidence in the work of the regular classroom and relate more freely to other pupils and to their teachers. Although classes in some districts are held before regular school hours, parents provide transportation and attendance is good. Enrollment in adult education classes has increased to a marked degree in several districts. Three high schools started programs at their own expense when the success of the programs in the elementary schools was demonstrated. If the expanded and extended program is approved, classes can be established wherever the pupils are located and great advances may be anticipated.

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[1] (Columbus, Ohio: The Ohio State University Press, 1965), p. 108.

A third problem relates to the need for appropriate materials on which to base instruction. Many of the materials now in use were developed before research done on the linguistic approach to learning a new language was widely accepted, and they are planned to teach English as a *foreign* language.

In the preparation of teaching materials, differences in purpose between teaching English as a *foreign* language and English as a *second* language should be clearly delineated. Second-language material must take into consideration the need the pupils will experience in the immediate future for vocabulary instruction to be used in studying other subjects; foreign language materials do not normally reflect this type of need. When English is taught as a foreign language, it is presented as an additional study to be pursued over a sequence of six to ten years with the purpose of pupils eventually being able to communicate in that language when necessary. Teaching English as a second language has more immediate and far-reaching goals because the pupils are, or soon will be, receiving basic instruction in English. The ability to succeed in these studies depends upon their knowledge of English. Under these circumstances the teaching of English as a second language is an urgent responsibility of the schools, not just a desirable enrichment of cultural opportunities.

However, chances for success are multiplied because opportunities for informal practice throughout the school day are abundant and because motivation to communicate with other pupils and with their teachers is high. Materials for English as a second language must be flexible, meaningful, and adapted to local home and school situations so that pupils can be on equal terms with their peers as soon as possible. It is anticipated that two years of special help will enable most pupils to join regular classes for the entire day.

All other factors being equal, materials designed to cope with the language problems of children in a specific cultural and linguistic area are superior to those which are written with no particular background in mind.

Materials to serve the many different types of foreign speaking children in California must be flexible, must be geared to the California scene so that the familiar aspects of the pupil's environment can be utilized, and for greatest effectiveness should be in harmony with the curriculum in California's schools.

The U. S. Office of Education has recently approved a grant to the University of California at Los Angeles and to the California State Department of Education to develop such materials for the elementary grades. Plans are to launch the project in the summer of 1965, prepare and field test the materials during the next year and a half, and complete the materials for a first edition by September 1, 1966.

The prospect of having materials which will help teachers provide a carefully planned, sequential program of instruction for English as a second language is indeed heartening.

Few elementary teachers in California have had any experience in teaching English as a second language. In fact, until foreign language programs were widely introduced in the elementary schools about five years ago, few were familiar with any of the techniques for teaching a new language. One of the problems in introducing the classes into Imperial and San Diego Counties was to find qualified teachers, and school districts elsewhere have met similar problems.

There has been a tendency on the part of some to think that the ability to speak English qualifies a teacher to teach English as a second language. A summer conference held at San Jose State College in 1963, the NDEA institute at University of California at Los Angeles in the summer of 1964, and conferences held in different regions of the state within the last two years have developed a leadership group which has given excellent, high quality service. Members of these groups have provided inservice education opportunities in several counties, have taught demonstration classes, and have launched special programs of great promise.

The fact that the National Defense Education Act has been extended to include the teaching of English as a second language is of great importance to inservice education. Many districts now are requesting consultant services, and some are planning intensive inservice education programs. If the proposal to provide funds for special classes becomes law, the need for qualified personnel will far exceed the supply, and providing adequate inservice programs will indeed be a major problem—and opportunity. The importance of expanding opportunities for preservice education is obvious.

I have cited four problems related to teaching English as a second language in California: (1) the large number of pupils involved; (2) the ways in which transiency and cultural and socioeconomic factors complicate the issues; (3) the need for adequate instructional materials; and (4) the need for expanding opportunities for inservice and preservice training of teachers in this field. For these problems the way seems clear to work toward improvement, if not solution.

However, there are some other problems which impinge upon the current educational scene and influence programs of teaching English as a second language. First is what I have called the movement for instant reading with its pressure on teachers, parents, and children. Teachers under these pressures are reluctant to give more than lip service to the accepted sequence of language learning: hearing and understanding, speaking, reading, and writing. They hurry the children into what passes for reading but what is really word calling. The warnings of neurologists and pediatricians regarding the damage which too early reading can do to English speaking pupils are neither as well known nor as widely heeded as they merit. This attitude is too often carried over to work with Spanish speaking children with resultant impairment of the programs provided for them.

A related instructional problem is failure to understand the extent and the continuing nature of a foreign language background. The pupils easily learn the vocabularies of home and school and appear to understand more than they do. However, many do not have the necessary background of language or of experience to deal with abstractions or to participate in discussions related to problem solving activities. They become lost in the complexities of the academic program in the upper grades and in the secondary school. Continuing assistance should be provided for them.

A third problem in this category is that of language loyalty. Some parents who speak acceptable English themselves send their children to kindergarten with a knowledge of Spanish only. The reasons for this are complex and varied. For some it may be that Spanish has always been the language of the home, and it has been comfortable to continue the use of this language with the children. "They will learn Spanish at home, and the school will teach the English."

With others the continuing use of Spanish is rejection of the dominant culture. Refusing to learn the language of a dominant group has been an accepted mode of rejection through the ages. Old wrongs are kept alive and passed on from one generation to another.

This attitude can be changed by the diligent application of two approaches. One is that of enlightened self-interest. Failure to accept reality is futile. We *gringos* are probably here to stay, and English is likely to continue to be the language spoken by those who wish to participate in the privileges and responsibilities of full citizenship in this country. This does not mean that a distinctive culture and a different language cannot survive and flourish.

Second, educators and others can recognize that speaking two or more languages at a high level of proficiency is a tremendous asset now and will be even more important in the years to come. We can help our foreign speaking children use their first language with precision and skill as well as to learn English at a high level. Programs of teaching Spanish to the Spanish speaking show great promise, and projects to establish bilingual schools are in the planning stages.

We can accept and value our multilingual people and let them know they are valued through removing all vestiges of the injustices and discriminations of the past which have left wounds which are not yet healed.

None of these problems is easy or simple, but none is insoluble. Conferences such as this one which bring together educators from many different areas of specialization can make an important contribution to the solutions.

PUBLIC SCHOOL INSERVICE TRAINING IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE TO ADULTS

Dora Pantell

In the New York City public school system the application of linguistic principles to the teaching of English as a second language has only recently begun to move up from Genesis. It is an exciting but still tentative evolution. Teacher resistance to change is never wholly absent from the process, and the temptation to relax into the old and more familiar often proves quite irresistible.

Because I have most specifically been involved in the adult education field, I am going to talk principally about inservice training in this area. The public school teaching of "English to foreigners" is traditionally part of the Americanization process. Its concern has been with citizenship preparation as well as with language instruction. The orientation aspects of citizenship preparation tended for many years to dominate the program. Teachers were more often commended for conveying understandings about the post office or the supermarket than for communicating any measurable language skills to their students. The teacher-telling implications of this kind of educational philosophy are still observable in the teacher-centered instruction found in many of our classrooms. The impact of the Gouin theme is also still very much with us. We trace this practice to the popularity of the Gouin application of the Direct Method, prevalent among so many of the college instructors giving our required preservice course.

Graduates of such courses conscientiously led class after class through the paces of developing a Gouin theme with comparatively few misgivings about the nonstructured organization of the theme and the negative implications this might have for gaining any control over the use of a new language. The overall climate of the program, where the role of the teacher as a needed friend and counselor often assumed more importance than his role as second-language instructor, tended to obscure the goals of our language teaching. The size of the program, the part-time nature of the job for most of its teachers and supervisors, the minimal required preparation they brought to the work—all of these often seemed overwhelming problems which tended to discourage commitment to more clearly defined language teaching principles requiring the concurrent and complex organization of inservice training plans for their implementation.

The impetus for the training of teachers in the application of linguistic principles to the teaching of English as a second language came in 1962 from a committee organized to revise the curriculum of our adult education program. In a sense I am putting the cart before the horse. The groping—and the interactions—of the committee actually represented the first stage in the inservice training process. Our committee consisted of the Assistant Director of the Bureau of Community Education, a New York State specialist in adult education, a New York City curriculum specialist with very recent full-time classroom experience, three full-time field supervisors of our day classes for adults, and four principals (or, as we call them, teachers-in-charge) of our evening adult schools. Not all members of the group were originally in favor of a linguistic approach. I may even say that not all knew very much about linguistic concepts. Initial arguments raged between pro- and anti-Gouin factions. Somewhat more sophisticated controversies centered on such issues as the value of controlled sound and structure teaching (still versus the Gouin theme, usually), the place and extent of pattern practice in a situational or functional context, and the feasibility of expecting part-time teachers in heterogeneous classes to plan graded instruction based, in large part, on interlingual and intralingual contrasts. Learning was inevitably involved in the clarification that preceded the designing of practical teacher suggestions for inclusion in the new curriculum bulletin.

New York City curriculum bulletins—more familiarly known as manuals—are usually introduced into the system in a research kind of framework. They may be tried out in the classroom, stey by step, as they are developed. Or they may be completed and distributed as experimental editions for teacher evaluation. The nonlinguistic background of most of our English-as-a-second-language teachers and of their supervisors precluded the possibility of evaluation—or even of implementation—without intensive inservice preparation. We started our training program as soon as we had enough mimeographed prepublication copies to give out to supervisors and teachers-in-charge. We inaugurated what amounted to almost a campaign along a number of simultaneous fronts. It concentrated on the following:

1. An interpretation of the manual to supervisors and to the teachers-in-charge responsible for teacher training in their individual evening adult schools. Regularly, for a full year, monthly meetings were held with this staff to discuss delimited sections in the manual and to demonstrate how the linguistic principles it recommended could be implemented in our program.

2. The assignment on a rotating basis of two master training teams to the evening adult schools. The teams gave classroom demonstrations of linguistic methodology and planned with teachers-in-charge as to how they might best use individual, grade, and general staff training conferences for purposes of linguistic orientation.

3. The assumption, by three full-time supervisors of day classes for adults, of the responsibility of working with promising teachers in the program on the development of linguistic understandings. When they were ready, these teachers gave borough-wide demonstrations with classes on beginning, intermediate, and advanced levels and acted as leaders in the discussion that followed. Their development contributed in a number of ways to the curriculum change process: they grew enough professionally to be able to evaluate our recommendations in the context of linguistic principles and to make suggestions for modification or

further application; they took on the "nonbelievers" with the arguments of their own experiences, thus helping to reduce the tensions surrounding a program more or less arbitrarily handed down from "on high"—and even more threatening—requiring, from most teachers, a drastic revision of outlook and approach.

4. The offering of a fully credited inservice course in the application of linguistic principles to the teaching of English as a second language to adults. This course marked the beginning of two major breakthroughs: the word "linguistic," as applied to the teaching of English, appeared for the first time in an official Board of Education inservice catalogue, an entry holding considerable significance for the future educational requirements of teachers in the field; and the multilevel applicability of basic linguistic concepts was made plain in a course attended by about forty teachers and supervisors involved in adult education and by approximately the same number of teachers and coordinators working with the non-English speaking populations in our elementary, junior, and senior high schools.

5. The use of television time over a period of a school year for discussion and demonstration of linguistic principles. Weekly half-hour Channel 13 programs, available for public viewing, were beamed into inservice classrooms as a focus for analysis and inquiry. Typical telecasts began with a round table exchange among invited specialists, followed by demonstrations of how a teacher could put into practice some of the points that were made. The televised classroom consisted of one or another New York City Board of Education teacher with four or five students from the elementary, junior high school, senior high school, or adult education program demonstrating the practical application of such linguistic concepts as the teaching of word order within a controlled structure frame, the development of discriminatory listening as a first step in intonation or pronunciation practice, and so on.

6. The cooperative planning with Channel 13 in its production of an English-as-a-second-language program, televised three times a day, three days a week, for Spanish speaking listeners. This was not, strictly speaking, an inservice course. Nor was its use of linguistic principles closely supervised by the Board of Education. The series was viewed, however, by a number of teachers who felt they had much to learn from lessons planned to demonstrate the sequence of second-language teaching, as well as the application of basic concepts.

7. The development of active relationships with teacher training institutions to help bridge the age old gap between theory and practice. This has turned out to be a two way learning process. Our manual, *Teaching English as a New Language to Adults,* is now being used in a number of universities where teachers are trained for second-language teaching. At the same time, Teachers College and the TESL Materials Development Project are trying out some of their ideas in New York City classrooms.

8. The involvement of university linguistics departments in working with us to assess our English-as-a-second-language program and to give our inservice sessions the benefit of broader perspectives. University scholars have appeared on our television programs as panel participants and as teachers demonstrating specific methodologies, participated as guest lecturers in our inservice courses,

served on committees organized to reevaluate the character of our across-the-board English as a second-language teaching, and, most recently, acted as consultants in the revision of our K-2 Language Arts curriculum, including English and "non-English" sections.

9. The stimulation of English-as-a-second-language teachers to professional growth and development through attendance in university classes, membership in professional organizations, participation in professional conferences, and directed reading of professional literature. The excitement engendered by some of our university guest lecturers appeared to have a distinct effect on university registration. More New York City Board of Education teachers and supervisors than ever before seem to be enrolling in linguistics courses. The impressive response to our showing of the MLA English language teaching films at inservice courses and at meetings of coordinators on the elementary school level was further indication to us of the potential of teacher interest. The degree of involvement in professional organizations extends, to date, mostly to membership in the National Association of Public School Adult Educators. Most learned organizations will either have to help us with teacher development—or wait. The same probably holds for attendance at professional conferences where lack of funds limits representation at any but local meetings. We have been able to do more—at least in our adult education program—with directed reading. Chapters in the professional literature are frequently the subject of school training conferences, new titles are posted on school bulletin boards, and school monies allocated for the purchase of books contributing to teacher enrichment or for subscriptions to professional periodicals which are circulated among school faculty members.

10. The preparation of linguistically oriented materials suitable to the needs, interest, and educational level of our students. The cry for books and audio-aids is a continuing one among our English-as-a-second-language teachers. It is particularly loud in the adult education program where all but a few of the existing texts or recorded materials are bewailed as too child-oriented, too advanced for use with beginning classes, too remote from the daily lives of our students, too lacking in integrated content, or not sufficiently spelled out for use by teachers whose hold on linguistic methodology is, more often than not, a very shaky one. Until enough of the "right" materials come along or until enough of our teachers learn how to use more of the existing linguistically oriented materials which are too much for them now, we are preparing whatever we can to help. In the adult education field our major project has been a set of twenty-five situational dialogues, taped with related pattern practices and accompanied by tape scripts and teacher instructions. The tapes were prepared, tested, and demonstrated in collaboration with a member of the Department of English and Foreign Languages at Teachers College.

11. The preparation of teacher training materials for use by teachers-in-charge. The teachers-in-charge are the key—and often the weakest—elements in our adult education program. For the most part, they have been in the system longest, have tended to become set in their ways, and seem to present the toughest resistance to implementation of linguistic ideology. They verbalize their attitude in terms of insufficient time. An administrator's handbook, now

in the process of publication, is designed to offer them concrete help in the organization of their schedules and in the unverbalized problem of just how to plan supervision and training for the application of linguistic principles in second-language teaching.

The eleven points I have described represent the special areas of emphasis connected with inservice training for English-as-a-second-language program. They supplement the more usual practices—staff institutes organized into workshops and demonstration sessions, regular supervisory meetings for discussion and demonstration of recommended techniques and materials, teacher interclass and interschool visitations for professional interchange, and other such procedures operating, in one way or another, on the various levels of our public school system. Even this apparently impressive array does not provide a consistently solid foundation, however. The teachers who shout out exultantly, "It works! It's marvelous!" after applying a demonstrated linguistic principle are likely to backslide without close supervision. The supervisor, or coordinator, or teacher-in-charge may be only two lessons ahead of the teacher. But two lessons are often an important beginning. And a teacher's enthusiastic interest is certainly a considerable gain. Together, they may imply "readiness" for the next stage and the next and eventually for the genuine professional involvement in the broad field of language and learning that is essentially the purpose of our inservice training program.

THE MIAMI EXPERIENCE IN BILINGUAL EDUCATION

Pauline Rojas

Introduction

Dade County Public Schools (Miami) have always had pupils whose mother tongue was not English, but it was not until the influx of Cuban refugee pupils in 1961 that drastic adjustments in administrative policy and curriculum became necessary in order to meet the special needs of this type of pupil. For an extended period during the school year 1961-62, Cuban pupils were entering our schools at an average rate of 250 a week, the highest number for any one week having been 320. Today only a mere trickle of Cuban refugees comes in, but we receive Spanish speaking pupils from all over Central and South America and other non-English mother-tongue pupils from many different countries in Europe and Asia. These latter are taken care of along with the Spanish speaking, who form by far the largest group. At present we have approximately 21,000 Spanish speaking students in elementary and secondary schools. Of these, only about 3350 are in special programs, with half of this number in first and second grades.

Administrative Policy

Our official administrative policy since 1961-62 requires that non-English mother-tongue pupils be scheduled into academic programs in accordance with their command of English, which varies greatly. Those who know English well enough to cope with the regular program offered to English speaking pupils are put into regular classes. We call these independents, and at present by far the largest number of our Spanish speaking are so classified. Pupils who communicate in English fairly fluently but still need special attention are offered special English for two class hours a day and are scheduled into regular classes for the rest of the day. These we call intermediates. We have about 700 secondary pupils in this type of program this year. The third group, the ones who speak little or no English, were originally offered three hours of special English a day in the third grade and above. We called these nonindependents, but at present we have no groups at all in this category. The bulk of the Cuban refugee pupils have been here long enough that they no longer constitute a special problem, with the exception of first grade pupils who often enter school knowing no English or very little. For them we now have a special language and reading program which I shall describe briefly later in this paper.

We recognize that non-English speaking pupils have the same range of academic and emotional problems as the rest of our school population, but as the foregoing explanation makes clear, we believe that their most urgent need is acquisition of English. We do not think that we can do very much toward solving their adjustment and academic problems until they can communicate with us. We also believe that it is the duty of the schools to teach these children English as rapidly as possible and that this task can be accomplished efficiently only through special methods and materials and specially trained teachers.

The Curriculum

The official textbooks for third grade and above of pupils needing special English are the books of the *Fries American English Series.* These books were originally developed for use in Puerto Rico, where English is taught as a special subject and everything else taught in Spanish. They are, therefore, in many ways not suitable for use in a situation such as ours in which all subjects except Spanish are taught in English. However, since they are textbooks in English as a second language, they do offer teachers guidance of a kind not to be found in language textbooks designed for English speaking pupils. As very few of our teachers at the beginning had any previous training in the teaching of English as a second language, these textbooks not only supplied them with material to be taught but also gave them detailed suggestions for techniques appropriate to second-language teaching. In spite of obvious deficiencies for a situation such as ours, these books were a godsend in the early days of the Cuban influx, and they are still used in the special classes in the secondary schools which offer English as a second language. First and second grade pupils in the beginning were taught with the traditional materials of these two grades, but teachers were urged to utilize second-language teaching techniques with special attention to oral practice of all content which the pupils were to be expected to read. First and second grade teachers were supplied with a copy of the teachers' *Guide to Books One and Two* of the *Fries American English Series* from which they could draw language material and techniques for teaching it.

The special language and reading program being offered to Spanish speaking children who entered first grade this year centers on the materials of the *Miami Linguistic Readers Series,* which are being developed under a Ford Foundation grant. These materials consist of pupils' books, teachers' manuals (with directions for both language and reading practice), seatwork books, charts, and "big books." The seatwork books supply the teacher with models which she can reproduce in order to provide the pupils with writing experiences which reinforce their speaking and reading practice. A more detailed description of these materials is presented on page 46 of this volume. The program for the first grade in the experimental edition will be made available this summer through D. C. Heath and Company.

Inservice training in teaching English as a second language has been offered in Dade County through group meetings, demonstration classes, and two summer workshops. The workshops were similar to NDEA language institutes, except that in addition to the theory courses (offered with University of Miami credit) participants all had to spend a part of each day teaching English as a second language to Spanish speaking pupils. The workshops were discontinued last summer, the need for them having practically disappeared. However, noncredit English classes have been continued for non-English mother-tongue pupils during a six weeks' summer session.

Spanish speaking pupils in Dade County in third grade and above are being offered what we call Spanish S. This is a Spanish language arts program for native speakers of Spanish. Through these courses we hope to do two things: (1) develop literacy in the mother tongue in pupils who have had all of their schooling in English and (2) reinforce and augment the training in Spanish language and literature of pupils who had schooling in Spanish before they entered our schools.

The Ford Foundation Project

In January 1962 we received a grant from the Ford Foundation under which we are developing the materials of the *Miami Linguistic Readers Series* and partially supporting a bilingual school. The bilingual school has two groups of Spanish speaking pupils and two of English speaking pupils in grades one through four with eight native Spanish speaking teachers and eight native English speaking teachers. English is the medium of instruction for all pupils for approximately half of each day; and Spanish, the medium of instruction for all pupils during the other half. Next year the fifth grade will be added and the following year the sixth. The expectation is that at the end of the sixth grade both groups of pupils will know the two languages well enough to operate effectively in both.

Summary

In summary, I would say that the salient features of our program are as follows:

1. Emphasis on the priority of English and the teachers' responsibility for the pupils' rapid and efficient acquisition of English.
2. Classification and grouping of non-English speaking pupils in accordance with their proficiency in the language.
3. Recognition of the need of Spanish speaking pupils for a special instructional program in Spanish.
4. Recognition of the need for special materials and special methods.
5. Recognition of the need for teacher training in the audiolingual approach.
6. The Ford Foundation project, under which the materials of the *Miami Linguistic Readers Series* are being developed.
7. Our bilingual school.

CONSTRUCTING A DEVELOPMENTAL READING PROGRAM FOR CHILDREN WHO SPEAK OTHER LANGUAGES: SOME BASIC CRITERIA

Ralph F. Robinett

The Bilingual Child

The object of our concern is a child who is commonly referred to as bilingual. The label "bilingual" may or may not describe his linguistic behavior. Probably a language other than English is spoken by his elders. The economic condition of his family leaves him without many of the benefits of a highly industrialized society. He may be blissfully innocent of his status in an Anglo-dominated community, or he may be well on the way to discovering some sociological facts of life. Among this multitude of problems facing our bilingual child is linguistic interference between the dialect of the school and the nonstandard English dialect or vernacular of the home.

Any effort to construct a developmental reading program for the bilingual must, then, take into consideration the cultural and linguistic experiences the child brings into the classroom, as well as the correspondences between the language and writing systems. We will consider here these three areas—the referential content, the linguistic content, and the graphemic content.

The Referential Content

There seems to be general agreement that the teaching of reading is facilitated if the child can relate to the referential content of the printed text. This consensus has led us in two directions: one toward the use of an experience approach, and the other toward the Anglo suburbia of Dick and Jane. Recognizing the uniqueness and inherent looseness of organization in experience reading activities, we must assume that sooner or later the child will need and want to go beyond himself and his immediate environment and into the world of books.

The culturally different, often disadvantaged, bilingual child, if he is to give his full attention and energy to learning to read, should not be limited to referential content which supports the sociological setting from which the school hopes to lead him, nor should he be confounded with referential content with which he can relate only in his wildest dreams. He should be provided with content that is cross-cultural and that draws on common human experiences. He should be provided with content that poses situations and problems inherent in subcultures as diverse as those of his home and his school. The referential content of beginning reading materials must deal with those things which time has shown are truly interesting to children.

In our efforts in the *Miami Linguistic Readers* to satisfy this basic criterion, we initiate the bilingual child into reading with stories which present animals behaving as human beings. The first story deals with Biff and Tiff, a dog and a puppy who learn important lessons from each other.

The second story is about the problems of an adventurous cat who overestimates his capabilities and finds himself in trouble. In the third story we meet Nat the Rat, who is not too good and not too bad. The rest of the first nine stories continue in a similar vein.

The stories of the second group are adaptations of folk tales such as *Jack and the Beanstalk* and *Rumpelstiltskin.* The remaining stories in the series present young people in exciting situations which can be categorized as "realistic."

The Linguistic Content

Conventional basal reading programs are not without their problems when it comes to linguistic content. Almost everyone who has taken the trouble to study such beginning reading materials has winced (or worse) when the materials tell them with such persistence to look and see. The problems in the linguistic content of materials designed for bilingual pupils are considerably more numerous and more complex.

When the bilingual child comes to school, he personally has no sounding board of acceptable English against which he can test the intent of the "preprimer-ese" message. Unlike his Anglo peer, the bilingual child has scarcely set out on the road to mastery of the language or dialect of the school. His sound system and his grammatical forms and arrangements have strong traces of interference from another language system. Three basic criteria become apparent in the selection, organization, and presentation of the linguistic content: that the materials must reflect natural language forms, that grammatical structure as well as vocabulary must be controlled, and that the child must have aural-oral control of the material he is expected to read.

In the *Miami Linguistic Readers* we have attempted to present the referential content in such a way that the sound system and the grammatical forms and sequences are natural and relevant to the situation of the story. The troublesome vowel phonemes are concentrated in meaningful, interesting situations and may be contrasted with other vowel phonemes used orally in the language activities. Hence problems intrinsic in pairs such as *sit-seat, slip-sleep,* and *pick-peak* are not relegated to pure manipulation drills. Likewise, names such as *King Kim* and *Kid Kit* were selected to help the pupil overcome consonant interferences from his own sound system. As the pupils progress in the material, they develop the ability to react to more complex contrasts such as *hit-hat-hut-hot* which serve both the spelling pattern and sound segment contrasts.

The grammatical forms and arrangements are controlled, just as the vocabulary. The two stories of Level One emphasize command forms and the present progressive, as in *Sit, Tiff* and *Tiff is sitting.* Level Two continues the progressive and emphasizes patterns of identification, as *Nat is a rat.* Level Three continues the progressive and identification and emphasizes patterns of description, as *Tug Duck is big* and *Buzz Bug is a big fat bug.* Also emphasized in Level Three are prepositional phrases, as *in his hut* and *in the sun.* Level Four introduces the third person singular *s* and negative statements, as in *Tod Fox* *drops a dish* and *Tod Fox is not mopping, Tod Fox is not with Mom Fox.* Each subsequent level in turn includes new grammatical patterns to which the teacher gives special attention as she presents the material.

The oral language experiences surrounding the reading attempt to provide systematic, meaningful oral practice to ensure at least minimal control over the linguistic forms and sequences to be read. In the ordering of the linguistic content, less concern has been shown for "logical" sequences, and more concern has been shown for the communication aspects of the language experience and the relevance of the language to the concept of the pupils' reading material.

The Graphemic Content

A central problem, though certainly not the only one, in the teaching of reading to bilingual children has to do with the selection and organization of the graphemic content. In reading programs designed for standard-dialect English speaking monolinguals, the effort devoted to the mastery of correspondences of sequences of sounds and sequences of graphemes is minimal and disorganized when considering the bilingual's need to develop control over the language and writing systems. Without considering possible relevance for vernacular reading instruction, from the standpoint of the bilingual child a prolonged and systematic presentation of the graphemic system, particularly as it relates to most sounds and vowel letters, is highly desirable.

Advocates of a strong sight-vocabulary approach, as well as most of the conventional basal reading programs, tend to underestimate the alphabetic nature of the English writing system. At the other extreme, a number of the phonics programs tend to overemphasize the individual sound-letter relationships. The actual correspondence between the language and writing systems is neither hieroglyphic, nor is it one of individual sound-letter correspondences. It is one of sequences of sounds and sequences of letters. A basic criterion is, then, to present the graphemic content in terms of patterns of sounds as they correspond to patterns of letters.

The sequence in *Miami Linguistic Readers* for satisfying this criterion is based on vowel-consonant patterns. Consonant letters in initial position are cumulated and given special attention as patterns of representation emerge. The focus in the sequence of vowel patterns for the first seventeen of the twenty-one projected titles is as follows:

LEVEL ONE-A	*i* as in *sit*
LEVEL ONE-B	*i* as in *sit*
LEVEL TWO	*a* as in *cat*
LEVEL THREE	*u* as in *hut*
PLATEAU REVIEW	
LEVEL FOUR	*o* as in *not*
LEVEL FIVE	*e* as in *get*
LEVEL SIX	*e* as in *he* *o* as in *no*
PLATEAU REVIEW	
LEVEL SEVEN	*ea* as in *eat* *ow* as in *cow* *alk* as in *walk*
LEVEL EIGHT	*ee* as in *need* *y* as in *why* *ere* as in *where*
LEVEL NINE	*a-e* as in *came* *ay* as in *day* *ou* as in *out* *o* as in *who*

PLATEAU REVIEW

LEVEL TEN
i-e as in *like*
igh as in *light*
o-e as in *some*
-ar as in *far*

LEVEL ELEVEN
oo as in *soon*
o-e as in *home*
ould as in *could*
-all as in *tall*

LEVEL TWELVE
ai as in *rain*
-y as in *baby*
-oi- as in *join*
-oy as in *boy*

PLATEAU REVIEW

With all our concern for a systematic implementation of the alphabetic principle, we must never lose sight of the fact that the process of reading is but a part of a comprehensive program which helps the pupil to develop the wide range of skills he needs in order to participate fully in the experiences of the school.

THE NONCOMPULSORY STUDENT LEARNS ENGLISH

Byrl E. Robinson

The purpose of this particular discussion is to synthesize procedures for helping adult volunteer students learn to use English by the application of modern methods of second-language teaching to what research has told us about the adult learner. For clarification, let us consider what is meant by the term adult volunteer student. In programs of post high school education, we find classes in which students are enrolled to earn definite or specific school credits; programs which students are required to attend as conditions of their employment such as apprenticeship classes; and programs which students attend for the purpose of securing particular credentials, certificates, diplomas, or licenses. Such students, although they may be considered as voluntarily participating, in reality are motivated by extrinsic goals which have the effect of making class attendance mandatory.

The adult student enrolled voluntarily in the English class, however, is under no such compulsion. If he learns the language, fine. He will receive his rewards, possibly, by gaining a better job or by an increased ease of living in his adopted country. On the other hand, if he does not learn the language he will continue to get along, to associate with members of his language group, and will adapt to living within the subculture rather than venture out into the larger so-called dominant community. Thus, when we refer to the *volunteer student,* we refer to those persons, normally over the age of eighteen, who are attending adult school classes on their own time for such benefit as may accrue to them without reference to course requirements, job demands, or other formal symbols of achievement. Our definition of the adult volunteer student is that student who is attending because he wants to, and not because he is required to.

The first learning concept that I would like to discuss relates to the commonly expressed idea, "You can't teach an old dog new tricks." But is this true? Let us consider what the experts say. J. R. Kidd, in his book *How Adults Learn,* lists this saying as one of the myths of learning, and he suggests that in spite of the evidence about the capacity of adults to learn, you will hear this myth repeated again and again. Let us consider ourselves: How does the chronological age of our students affect our attitudes toward them? How do we react to the older students? Do we expect them to learn, or do we tend to ignore their presence in the classroom? Irving Lorge found as a result of his studies that if *speed* of reaction is excluded, data indicate that adults learn as effectively as children or youth. He sums up the findings of research in this area in his essay in *Education for Later Maturity*: "Whenever learning ability is measured in terms of power ability, for example, learning without stringent time limits, the evidence is clear that the learning ability does not change significantly from age twenty to sixty years." Then he goes on to say that adults within this twenty to sixty age group should not use their chronological ages as excuses for nonparticipation in educational endeavors!

Adults enrolled in English classes are probably unaware of this research, but it is quite certain that frequently they have heard the "Old dog, new tricks" adage. Even though adult students do not vocalize their fears or feelings of inadequacy about their abilities to learn, their subdued, half-apologetic manner of participating tends to indicate their true feelings. This unjustified fear about ability to learn will act as a barrier to learning; their feelings of timidity will prevent them from taking positive steps to acquire desired skills. Isn't it our job to allay this fear? Isn't it our job to give them praise and encouragement for their efforts? Isn't it our job to project the image that says, "I have confidence in you" and "I have confidence in your ability to learn"? Isn't it our job to convince them that they are not too old to learn?

The second learning concept is that students learn most efficiently that which they can relate to the solution of their own problem. For example, a housewife from Latin America would have difficulty acquiring language skills involving an unfamiliar content such as auto mechanics, whereas she would learn readily language suitable to her homemaker role—grocery shopping, child care, home management. Material for the lesson should be selected for its application values to everyday living. To illustrate, adults are concerned with obtaining an operator's license and learning about income tax forms and job application forms. These are practical topics which can be utilized to teach the structure, intonation, word order, and vocabulary of the language, and at the same time are of vital interest and real concern to students.

A caution is in order. As teachers we tend, at times, to assume that students are able to relate this information to their lives. But can they? What do we know about their everyday lives? We must find out. This implies that the teacher must take positive steps, from the very first meeting of the class, to become knowledgeable of the background of each individual student—to acquire understanding of the differences in motivation, in economic conditions, in sociocultural experiences, as well as in mental ability and formal education. Without this knowledge the teacher cannot plan the lesson which will have everyday application and which, therefore, will be learned most efficiently.

A third concept is that adult students want to put into immediate use that which they have learned. For persons who are intimately involved in the day-to-day process of making a living and fulfilling responsibilities, the important word is *now.* With children and youth it is possible for the teacher to say, "Well, you will need to know this later!" For the adult learner, *later* is not a valid argument. Later, in their opinions, is probably no later than tomorrow! However, the wise teacher can take advantage of this urgency and, by basing instructional material upon immediate social needs of the students, can develop skills in language patterns, the successful use of which tends to provide re-motivation and reinforcement of learning. An example of this might be the student who masters the request for "Coffee, with cream and sugar, please." If he is able to go to a restaurant after his first lesson, order his "Coffee, with cream and sugar," and receive coffee with cream and sugar, he receives tremendous personal satisfaction from his accomplishment. Verify this through your own experience. Most of us have traveled in some foreign countries. Weren't you pleased with yourself when you could ask simple questions and receive the expected reactions? Well, our adult student gets the same satisfactions, doesn't he?

A fourth concept of adult learning is pointed up in the California State Department of Education publication *Handbook for Teachers of Adults.* The adult's need to participate in classroom activities is a principle of effective learning. It would seem that the application of audiolingual techniques would provide direct opportunity for each individual to participate actively in the classroom program and would thus conform to this principle. But let us think through what is meant by the word *participate.* Do we mean that only the individual who is performing is participating? No. We must include all those activities such as listening, muscular response, changes of expression, subvocal responses, and the concomitant intellectual processes which accompany such reactions. Carl Lefevre, in his recent *Linguistics and the Teaching of Reading,* utilizes the term *auding.* As Lefevre uses *auding,* the term connotes all the activities which have been mentioned—the actual process of active participation without audible vocalization.

Now, let's take a different look at this concept of participation; let us consider participation from the point of view of belonging to or identifying with the group. The teaching role carries with it the responsibility to project to each individual a genuine feeling of warmth and acceptance. The adult learner must have the feeling that he is an accepted member of the class.

Participation could also include the development of an atmosphere of shared responsibility for the activities and experiences that are taking place in the classroom. For example, consider a class which has been operating for a number of weeks. One night six new United States residents to whom English is a complete mystery arrive for instruction. It would seem that the teacher in this instance would have an opportunity for developing an environment of shared responsibility, an environment that charges the students in the already established group to participate willingly in a program of partial review which serves the twofold purpose of inducting the new members into the established school community and, at the same time, providing reinforcement of materials previously learned. Isn't this in miniature what we believe? Don't we provide educational opportunities for all individuals at any time in their lives knowing that our strength as a democratic form of government rests upon the collective abilities of this nation of individuals? The microcosm of the English-as-a-second-language classroom exemplifies all these aspects of participation, speaking, auding, and, above all, belonging.

A fifth concept, outlined in the *Handbook for Teachers of Adults,* is simply "adults must enjoy the instruction." Every individual experiences many forces impinging upon his consciousness, forces which demand action in day-to-day living. Don't we constantly make choices? Life is a matter of choices. We decide whether to wear a red tie or blue tie, whether to go to the ball game or to go to the opera. An adult as a student faces the same types of demands. Should he watch television? Should he read a magazine? Should he have a few beers at the corner bar? Should he go to adult school? Choices which relate to leisure time activities involve the decision between pure pleasure and more constructive activities. Certainly, to go to school requires a higher degree of self-discipline than some less demanding pursuit. We would suggest that the teacher, in competing with these various alternatives, is, in effect, a salesman. The wise salesman makes his product as palatable as possible for his customers, makes the time and effort expended in the classroom an enjoyable experience, makes the satisfactions derived from the experience more pleasurable than say the TV, the beer parlor, or the ball game. And, conversely, if the students are deriving pleasure and satisfaction, the teacher will find that his work is much more enjoyable.

Two other ideas from the area of educational psychology should be explored. The first of these might be described as the principle of proceeding from the known to the unknown, from what the student already comprehends, or uses, to what we would like him to learn in the particular lesson. The competent teacher, almost instinctively, draws upon the prior experiences of the class to explain newer materials, almost instinctively uses analogies, examples, similarities to enable the learner to integrate newer experiences into what he has already acquired. The language teacher, no less than the shop or typing teacher, can profit from applying this known-to-unknown idea to lesson planning, and the students will profit from such careful planning. The second principle which should be recognized bears the label of "whole-part-whole" learning. In essence this means that we tend to learn better if we acquire some understanding of the total picture, tend to become more familiar with details, and finally consolidate the more thoroughly learned parts into the then well-learned "whole." Learning techniques of tennis exemplify this process. You do not learn to hit a tennis ball properly by breaking the performance into small segments. First, you learn the full, complete stroke. At a later time, you are able to make refinements, to analyze detailed techniques, and at a still later date, the whole process, now almost overlearned, becomes habitual. Let's apply this to the language lesson. The language of the particular lesson must first be presented as a whole experience. Details of pronunciation, structure, arrangement of words, and intonation pattern are learned subsequent to the initial exposure to the whole situation. Sufficient practice in manipulation of these discrete language elements results in fusion into the whole pattern of the learning process.

These things we have learned from the research. But the classroom teacher must be cognizant of circumstances and situations beyond the realm of psychology, pedagogy, and school management which affect the volunteer adult student. Briefly, the conditions of the student's life, employment or lack of employment, family situation, transportation problems, health, social obligations, religious commitments, and a myriad of other causes tend to dictate whether or not he will enroll and persist in his school program. Of necessity some students will drop by the wayside for the reasons just mentioned. The skilled teacher of the volunteer adult student will plan the class work so that each person will want to continue and achieve, so that each person will be challenged by some phase of the work and will leave the room saying, "This was a profitable and pleasant

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expenditure of time and effort." He'll probably say, "This was fun and I learned a lot!"

To recapitulate, modern psychology tells us that adults have the ability to learn when speed of learning is discounted; that persons learn most efficiently that which can be related to the solutions of their own problems; that adults want to put what they learn into immediate use; that adults need to participate actively in the classroom; that adults need to belong to a group; and that persons must enjoy the instruction. Modern pedagogy indicates that adults learn more effectively from lessons which relate known to unknown elements and which utilize the whole-part-whole principle. The audiolingual approach, implemented by the knowledgeable teacher, meets the requirements of these psychological concepts and sound pedagogical techniques. The audiolingual method encourages participation, group feelings, immediacy of use, and relating to practical situations, while maximizing the employment of the perceptive senses. The volunteer adult student, the student who is in your class by no compulsion other than his own desires to learn, derives increasing satisfaction from his growing skills; and his skills will develop commensurate with your understanding of theories of learning, your application to classroom work, and your empathy with these new Americans as responsible, thinking adults.

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ORGANIZING CONTENT FOR THE BILINGUAL CHILD

Elizabeth Ott

With the advent of the atomic age, the curriculum at all levels should assume new dimensions and provide new and compelling purposes for study. The new curriculum should develop:

1. understandings of the world culture of which we are an integral part, whether we like it or not;
2. a better grasp of the burgeoning technological developments through learning the basic knowledge and theory which underlie them;
3. the behaviors and attitudes for both critical and creative problem solving needed for independent thinking, not only on today's problems, but for problems arising in the future.

What Are the Implications for Pupils of a Non-English Speaking Background?

Many teachers who are experienced in teaching children from a non-English background consider themselves relatively successful in developing in their pupils a style and vocabulary in "basic" English, free from gross errors in syntax and morphology, and adequate for self-expression of daily experiences. The content of the beginning English language program usually and logically is based primarily on English structures essential for communication and conversation in social situations. Frequently, however, teachers find the teaching of subject matter content, with its heavy load of concepts and terminology, a complex task indeed, for all pupils, but more particularly for pupils who must learn such material through the medium of a "foreign" language. Traditionally, textbooks assume certain common experiences and are written for the native English speaking child. Therefore, it becomes the task of the school personnel to organize the subject matter content and the methodology composing the curriculum to meet the particular needs of the non-English speaking child. Decisions immediately facing the school personnel concern the procedure to follow, including steps to be taken and their sequence, for effectively reaching the goal.

Reorganization of Content for the Bilingual Child

The following outline is an example of such a beginning reorganization of curricular content for the bilingual child and is the general procedure for the development of materials now being used in the United States Office of Education Project #2648, "The Teaching of Reading to Spanish-Speaking Beginners," a research study in progress and conducted by the University of Texas.

I. For each of the disciplines to be taught through the medium of English as a foreign language, the content is analyzed to determine the special basic abilities it requires, considering:

1. its value to education
2. the inherent structure of the subject matter area
3. the various symbol systems, e.g., the numerals and signs of mathematical processes
4. various relevant methods of instruction for this content
5. the types of problems it solves
6. the kinds of inquiry which it fosters.

In the Texas study, the processes of scientific behavior were selected as the vehicle for oral language development, as a part of the reading readiness program for non-English speaking children. This content was chosen since it is "culture fair." By this we mean that this content does *not* assume a particular set of expressions for some socioeconomic level. It involves a multisensory aproach to learning, i.e., seeing, hearing, tasting, feeling, and an awareness of time and space. To do this, a sequence of experiences is set up for developing and sharpening visual discrimination, perception of odor, awareness of texture, orientation in space and time, and sensitivity to order and sequence, directions, temperature, changes, arrangements.

II. The major topics to be learned must be selected and a sequence determined for presenting them. This can be done by surveying texts and supplementary reinforcement and enrichment materials. The teacher must then make decisions in keeping with the developmental level of the learners. This includes the physical, emotional, experiential achievement levels, as well as any other characteristics particular to the group.

For example, the topical sequence in our study begins with the process of observation: identifying shapes, components of shapes, color, size, and texture. The next major topics deal further with the development of sensory perception: sounds, odors, flavors; then on to space-time relationships.

III. Next, there should be set up a hierarchy of the cognitive behaviors to be developed within each topic. These are the objectives which are formulated from understandings and abilities around which specific lessons will be designed. Such a hierarchy should begin with the most basic and concrete types of thinking, developing up into the more complex and abstract and leading to the formation of concepts. The following is taken from the conceptual framework of USOE #2648.

Types of Thinking

1. *Inductive* (Vertical ↑). Reasoning from particular concrete instances possessing certain common and distinctive properties to the general class, principle, or relationship; it includes relating new instances to a generalization.

2. *Deductive* (Vertical ↓). Reasoning from a concept, principle, or relationship to particular instances possessing the common and distinctive properties of the generalization; it includes applying an appropriate generalization to new instances.
3. *Analogical* (Horizontal ⇄). Comparing seemingly diverse instances to derive linking properties and relationships or parallels.
4. *Imaginative* (ꝏꝏꝏ *). Spontaneous and new combinations and relationships *to the child* are perceived; it includes the use of materials or objects considered in only one context in new and personally satisfying ways, e.g., making a train out of two-dimensional shapes.

(Classifying is a critical behavior in 1-3. All the above types of thinking are important to the development of reading.)

Concept Formation Model

Level 1: Labeling and Percept Formation. Association of phenomena with language. Manifestations are:

1. repetition or the saying of the "names" for concepts, properties, terms, and relationships in appropriate language patterns
2. spontaneous linkage of the specific and general phenomena with their verbal representations after a few previous exposures, e.g., picking out a circle and naming it.

Level 2: Partial Concepts and Relationships. Incomplete generalization and differentiation. Manifestations are:

1. a limited number of applications of a concept to specific instances
2. definitions which are imprecise and have gaps
3. inconsistencies in relating specific instances to a concept
4. number of properties associated with a concept either incomplete or not yet fully habituated.

Level 3: Complete Concepts and Relationships. Full generalization and differentiation appropriate to the child's maturity level. Manifestations are:

1. definition of concept
2. proof by inspection and description of common and distinctive properties
3. accurate, consistent applications of concepts to specific instances
4. spontaneous use of concepts and relationships in classifying new phenomena, i.e., generalizing to other experiences
5. recognition of analogical relationships among concrete objects and experiences.

IV. The next step is to identify the specific terminology and symbolism inherent in the material to be learned. The terms, then, must be couched in structure models which are chosen on the basis of frequency and usefulness to the learner. They should be as simple and explicit as possible and should be representative of linguistic expressions which are typical and acceptable to the English speaking community.

Linguistic considerations should be:

1. *Syntactical.* Development of basic sentence structures in English
2. *Morphological.* Development of inflections and derivational forms
3. *Phonological.* Development of patterns of sounds, stress, and intonation in English; particular sound combinations occurring in English which are lacking in Spanish
4. *Functional.* Development of basic patterns which the children will need to:
    - a. handle basic oral-aural communication in English
    - b. describe or learn about their environment
    - c. achieve at least a fair chance for success in beginning reading instruction.

V. All learning should be accompanied by concrete experiences, illustrating the meaning of the concepts being developed cognitively and expressed linguistically. By actively experiencing through the senses, i.e., observing, handling, rearranging, matching, smelling, tasting, feeling, the meanings of the language and the relationships being expressed are firmly established and reinforced. Therefore, provisions must be made for:

Experiential Buildup, including:

1. variety of direct experiences which undergird language development
2. logical progression of direct experiences aimed at furthering both cognitive and language development
3. description of direct experiences with oral language at all levels of concept development
4. structuring of the learning experiences to provide for use of previous experiences and for the generalization and transfer of learning.

VI. Finally, the development of step-by-step procedures for teaching language patterns should be established. The methodology should include audio-lingual techniques providing a variety of language reinforcement drills.

Briefly, there are three stages in the development of oral facility:

1. The teacher first produces the structure model and repeats it several times; the class then produces the structure model. This first step should be repeated until it is evident that most of the class is able to hear and reproduce the model. The first step is then followed by continuation of modeling by the teacher, but successively smaller subdivisions of the class respond until it becomes an individual response by each child.
2. The second developmental step involves only cuing by the teacher, with the class, smaller groups, then individuals responding. During this second phase the teacher will need to be attentive to the pupil's language, and when necessary the teacher should supply the model again.

3. Finally, mastery is evidenced when pupils are able to communicate, using the specific structure models independently in situations appropriate to meanings.

Special techniques should be incorporated, e.g., the backward buildup for the mastery of longer structures, and linguistic games including word drills on pair-sounds for accurate production of English speech sounds. These procedures for teaching English as a foreign language should be written in detail in the sequence to be followed by the teacher. Where linguistic problems are anticipated, provisions should be made by suggesting remedial drills, games, exercises, and activities.

THE TEACHING OF MATHEMATICS IN AFRICA THROUGH THE MEDIUM OF ENGLISH

Shirley Hill

To be a nonexpert in the field of language standing before a group of linguistic experts and discussing what I suspect to be rather subtle problems in the language of young African children is audacious indeed. Nonetheless, one cannot be for long in the classrooms of Africa without an awareness of how problems of language permeate, complicate, and exacerbate all other educational problems.

Before going on to the question of teaching mathematics in a second language, a description of the specific context and the limitations of my experience is perhaps appropriate.

During the past four years I have been involved in a program introducing a modern approach to mathematics in the primary schools of several African countries. There have been several phases of this program. In the first, new and experimental materials developed in the United States, for American classes, were introduced in ten grade one classes in Ghana and in a few additional grade one classes in Liberia and Sierra Leone. The regular classroom teachers attended brief but intensive training courses in preparation for teaching these materials.

My role in this phase of the program was varied. I had been one of the developers of an American program and had worked for three years in an experimental classroom program in California. My role in the African program has been much the same. My colleagues and I gave the orientation and institutes for teachers. After the classes began, we continued as consultants, working in classrooms with teachers and children and giving demonstration lessons.

The second phase of the program was the preparation and experimental use of textbook materials for African schools. This is a cooperative writing project bringing together mathematicians, mathematics educators, and teachers from ten African countries, the United States, and the United Kingdom. It is an attempt to assess the appropriateness of adapting new approaches in mathematics teaching to the African context. As opposed to the foreign materials used traditionally, the objective is to provide mathematically sound curricular materials that are relevant to the African child's concepts and to his milieu.

At the present time, books for grades one, two, and three in primary schools and for three years of secondary school have been written and are in use experimentally in the ten participating African countries.

My own role in this project has been as a member of the primary writing team, a lecturer in teacher institutes in mathematics, and a demonstration teacher.

The African countries concerned are, with one exception, countries in which English is the official language. For the vast majority of school children, however, it is a second or even third language. Very few of the children in the experimental classes know any English when first enrolling in school. There is considerable variation in the instructional language medium in the primary schools participating in the experimentation. (In all secondary schools it is English.) I shall confine my discussion, however, to primary schools so that further remarks refer only to the first few years of school. In some situations English is the medium of instruction exclusively from grade one on. In others, the vernacular of the area is the medium for two or perhaps three years. During this period English is taught as a foreign language. In still others, the medium is Swahili, which is for the students a second language but a relatively familiar second language by the time of school entrance.

In the first two years, the students' books in the program are entirely nonverbal, i.e., there is no printed text. This does not imply that instruction is nonverbal. On the contrary, my own impression is that there is every bit as much verbalization in the African classroom (on the teacher's part, not the child's) as in the American classroom. Much less of it is understood if the language is English. Thus there is often a greater reliance upon other communicative cues, gestures, demonstration, and direct reference to physical objects. In one sense, this may benefit the introduction of elementary mathematical concepts because the teacher necessarily keeps the introduction at a concrete level, and it may be easier to avoid the temptation of a too early progression to abstractions and barren terminology.

All teachers' guides to the books are written in English and are unusually explicit and detailed. This means that in classes in which the medium is the vernacular, teachers read the mathematical background, instructions, and suggestions for teaching in English and proceed to translate this into their teaching in another language. One of the significant unanswered questions here is to what degree of accuracy this is even possible. H. A. Gleason, in a provocative paper dealing with African languages in education, has suggested that many Africans possess a superficial kind of bilingualism. They learn to speak one language in one situation or in dealing with one subject and another in another. They may talk of traditional things in the vernacular and of modern things in a world language.[1]

Are we asking too much then when we ask the teacher to learn his mathematics in English and then convey effectively and precisely the conceptual structure in a vastly different linguistic structure? This is much more than the ability to translate in the narrow sense of a sentence for sentence equivalent. The teachers may not recognize a difficulty, but the subtle variations which may result could be disastrous to a true understanding of a subject requiring the precision of mathematics. Of course, the question is complicated by the fact that the English of the primary teacher is typically far from standard or fluent.

But perhaps this question is somewhat parenthetical to the specific topic of concern to this conference. What of the child who is learning many subjects through the medium of English, a language whose patterns and structure are vastly different from his own?

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[1] H. A. Gleason, "African Languages in Education," Unpub. MS (Watertown, Mass.: Educational Services, Inc., 1964).

My initial impressions were that the teaching of mathematics to this child was in actuality very similar to the teaching of mathematics to the English speaking American child. In my first teaching experiences, responses were similar, there were no more difficulties, and the classes moved along through the lessons in much the same way and at much the same pace. This impression was reinforced in a more objective way by achievement tests. When American children and West African children used the same materials, we did not get significant differences on tests. Even the rank order of difficulty of individual items was with few exceptions the same.

I can remember thinking that those of us concerned with teaching mathematics had easier going than those concerned with some other subjects because mathematics was itself a language, in fact a universal language. Once we could develop a small stock of terms and teach the symbols of this language, we could avoid some of the ambiguities of a natural language and communicate as much as possible through the medium of this symbolic system. At least, not all expression of ideas would have to be couched in English terms.

This, I now feel, is a very naive attitude. The fact of considerable surface similarity tends to obscure what may be important conceptual differences. Because the African children seem to progress through a program in much the same way American children do, we might conclude that all we need to do in writing African materials is to take the same approach but make illustrations, examples, and problems relevant to African life.

I submit that we need to look much deeper at differences which perhaps relate to language meanings. A few examples from some cross-cultural studies may illustrate or suggest this.

I suppose that there is no more important idea in mathematics teaching than the relation of equality. This relation is that of identity or, in ordinary terms, it may be expressed by the phrase, "is the same as." Our studies asked, "What does the notion of sameness mean to young children in the context of several important mathematical concepts?"

To be specific, children from two cultures were asked, in a controlled laboratory setting, if certain pairs of pictured sets of objects were the same or not the same.[2] The West African children were given instructions which used the English words "the same" and also the equivalent in their vernacular. The instructions for the American children simply used the words "the same." Results indicated that the American children's concept of sameness as applied to sets was entirely different than that of the West African children. Sameness for the African child meant that sets have exactly the same members. Sameness for the American child required that the members were the same and in the same order.

In mathematics, the concept of a set is basic, and it is the starting point for modern programs in teaching arithmetic. Surely the suggested differences are pertinent to teaching about sets.

In another similar experiment, the children were shown a geometric figure, then shown a pair of figures and asked which one was *the same* as the original figure.[3] In every example the choice was between a similar but smaller figure of the same shape and in the same position, and a congruent figure rotated 180 degrees to a different position. Most of the African children consistently selected the congruent figure regardless of rotation. Most of the American children consistently selected the smaller figure in the same position as the original. It is sheer speculation, but one might conclude from the two experiments that the American child is more oriented toward the symbols or pictures as such, while the African child is oriented toward the thing represented.

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[2] S. Hill, "Cultural Differences in Mathematical Concept Learning," *The American Anthropologist*, LXVI, 3 (June 1964).

These are isolated examples, but they illustrate critical differences which superficial similarities in classroom results tend to obscure. Is it possible that such differences parallel language differences? Perhaps a comparative examination of language differences in expressing certain basic mathematic concepts is needed. There are, for example, certain ways in which many African languages express "greater than," "smaller than," inequality relations which are strikingly different from English usage. Yet the tendency in teaching in English in Africa is to proceed as if the words used could have only the meanings that we in Western culture attach.

A comparative study of the vernacular and English might help the mathematics educator determine to what extent he should emphasize that mathematics is a language, that a mathematical sentence is to be read just as a sentence in the natural language is read. Consider an example of a simple mathematical sentence:

$$2+2=4$$

The child should see this as expressing a relation between two names for a number. He reads it as a sentence in which "2 + 2" is a noun, "4" is a noun, and the symbol for equality is the verb expressing the identity of the two things. The mathematical sentence is parallel in form and word order to an English sentence. The symbol for the relation occurs between the two symbols for numbers (the nouns) as in the similar sentence "Mark Twain is Samuel Clemens." Where this is not true in the vernacular, the mathematical sentence idea may not be as easily conveyed even if the medium of instruction is English.

There are many instances in which I have found that the approach to teaching about a concept has differed in American classes and African classes because of language even though both groups were taught in English. Let us take the acquisition of the concept of a set. A set is a collection or family of things. In the American classroom the teacher often develops this concept by referring first to familiar words, such as collection, and then making the idea more precise by examples before attaching the label "set." He defines it largely in other verbal terms. One problem is that these words do not mean precisely what the mathematical term "set" means. A collection usually means more than one object, a set may have one or none; a family has certain intrinsic relationships among members, a set need not. Even the English word "set" usually connotes a similarity in objects as in "set of dishes"; the objects in a mathematical set may be utterly dissimilar.

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[3] P. Suppes and M. Bandy, Unpub. Study (Palo Alto, Calif.: Institute for Mathematical Studies in the Social Sciences, Stanford University, 1964).

In the African class, verbal definition is usually difficult or even impossible. The children probably do not know the other similar words or synonyms. So the teacher must resort to concrete examples of sets, pointing to or holding up one after another and giving it the term "set." There is little chance of ambiguity here. A good American teacher will do the same, but because of the inadequacy in English of his pupils the African teacher is forced to take what may be the sounder approach. At the same time, an opportunity to teach English alongside the mathematics may be lost.

To conclude, I should like to refer back to the problem of what Gleason calls a "language schizophrenia." The African learns and uses one language in particular activities with particular subjects and learns and uses another language with other activities and subjects. The child who hears and uses only the vernacular in the direct, meaningful associations of everyday life and hears and uses only English in the more remote, abstracted setting of the school exists in two utterly unrelated and discontinuous cultures. Interaction is made difficult. Can he learn to bring to bear mathematical and scientific concepts learned in one language on practical activities in the domain of his native language?

Often, in a classroom in which instruction is to be in English, I have heard teachers return to the vernacular to give directions, to inquire, to present a logical argument, to explain complicated relations such as cause-effect relations. Such explanations require sophistication of language; they typically use complex sentences and logical connectives. The result is that practice in reasoning, inquiry, logical deduction, explanation, and the like is seldom available in English.

If the skills of inquiry and reasoning are developed largely in the vernacular, the problems of mathematics taught in English will be very remote from everyday problem solving. I do not think we can get the skill in inquiry that good mathematics teaching requires unless children have a good deal of practice in the use of English in which logical connectives, questions, explanations, and reasoning play an important role. The alternative is what one finds too often in African classrooms, a heavy emphasis on rote memorization.

THE CHALLENGE OF OVERSEAS SEMINARS

Mary Finocchiaro

Nothing I have done in a career which has taken many unusual turns has ever equalled the sense of achievement and challenge which I have derived from my assignments abroad. My life has been fuller, my service to my students at universities in the United States more meaningful, as I have enriched my lectures with the experiences I have had in many countries. My assurance that teachers the world over have problems and concerns which are startlingly similar and the ensuing discussions of the ingenious ways in which teachers overseas handle their problems have helped my American students gain a new and often healthier perspective.

But now let me briefly tell you about some of the real difficulties one may encounter on overseas assignments. Let me tell you, too, about some of the activities in which the American specialist can engage which seem to find favor in the eyes and ears of seminar participants.

Many of the problems are beyond the control of the English teaching specialist, and yet they influence the reception he and his work are given and the conditions under which he can work. The internal and international politics as well as the currently accepted sociological thinking of the country play an important role. In Turkey, for example, I was conducting a seminar one summer while Premier Menderes was awaiting execution. Another year a revolution was scheduled to take place two nights after my arrival.

The action of Congress in withholding food, arms, or money from countries abroad and the newspaper publicity of congressional action cannot help but have an effect on the local participants. Representatives of foreign ministries are particularly sensitive to their government's reaction to the United States. I recall another seminar when Italy had just decided that it was high time the northern Italians got to know southern Italians and southern Italy. As a consequence, our seminar was conducted in an inaccessible, rather forbidding locale in southern Italy, which did little to bring about the rapprochement the Italian government was actively seeking and which made our task unusually difficult.

In some countries where the British Council has worked for many years in the field of English teaching, the presence of Americans may cause some initial problems. The seminar participants have learned British pronunciation and often find the adjustment to American pronunciation features confusing. To make it worse, some chauvinistic members of the British Council who may feel threatened by the presence of Americans are quick to point out what they consider the inelegant speech of all Americans. You may notice that I used the word "initial" when I mentioned this problem. The Anglo-American situation can be straightened out to everyone's satisfaction by a clear demarcation of roles and by jointly sponsored activities. At one seminar I remember vividly a British Council member's playing host to an American's Lady Godiva. At another, a panel discussion in which American and British staff members "spoofed" each other about their respective languages dispelled the climate of rivalry or competition which seminar participants sense and often aggrandize.

Another problem may stem from the American specialist's not being thoroughly conversant with such facets of the teaching situation as class size (in Turkey, for example, it is not unusual to have eighty-five students in an English class); teachers' salaries; and the quality and availability of books and other instructional materials. On my first trip to an overseas seminar, I went with thirteen valises full of such things as tapes, pictures, and flannel boards. I discarded them all after the first day and concentrated on showing how chalk and the chalkboard could be effective and how much of the other material could be prepared for a few pennies.

Even more important is the necessity of becoming thoroughly familiar with important aspects of the culture of the country. When the seminar director has lived in the country for some time, the possibility of cultural "shocks" is reduced appreciably. He knows, for example, that a coffee break at ten o'clock is sacred, or that remarks about dating are taboo, or that evening classes or programs are frowned upon. When, in short-term seminars, we try to force participants to accept the "no siesta" dictum of our way of life, we find that the participants' resentment may carry over to other features of the program.

Another facet of our culture to which there needs to be a much longer period of orientation than a one- or two-sentence announcement is the placement test. In most seminars adult student-participants are placed in classes according to their language ability as measured by formal tests with which participants have no familiarity. Such placement causes a loss of prestige and a consequent sense of deep resentment. Ways of rotating students have had to be found in order to avoid pitting colleagues against each other.

Yet it is all too true that participants attending English seminars bring with them wide variation in linguistic and teaching competency. Some may never hear English spoken from one year to another. Some, I would say the majority, have never taken a course in structural or applied linguistics. We are all aware that many countries abroad still emphasize historical linguistics.

But now let us accentuate the positive. What are some of the things I have done and I have seen others do at seminars which were designed not only to overcome some of the difficulties I have mentioned but also to achieve the objectives of English teaching seminars? The objectives usually focused upon are these: (1) increasing the linguistic competency of the participants; (2) giving them insight into linguistics and its applications; and (3) helping them prepare instructional materials for use in their own teaching situation.

Let me enumerate some constructive activities or principles very briefly. While planning carefully in advance, we must maintain flexibility in order to offer on-the-spot help to the participants in those aspects of English in which *they* feel they need help. In some countries the English of the participants is superb, while in others a large amount of time needs to be spent on developing their linguistic competency. In doing so, we found it more desirable to give priority to fostering the ability of the teachers to produce as perfectly as possible those features of the sound, structure, and vocabulary systems which appear in their school textbooks and which they will have to present to their pupils in their English classes. In other words, they appreciate being helped to do better the things they are going to have to do. Too much time is often spent in discussion and practice of intonation and stress patterns which the teacher may never meet or use.

The TESOL specialist should be cognizant of areas of teaching and administration related to his specialty. In one country I was required to help establish a student teaching program. They expected me to know about the selection of students, of cooperating schools, and of materials. They asked me to determine criteria for observation of teachers and to conduct orientation sessions for college and public school personnel. In another country I gave three lectures on the administration of a language laboratory as well as on the integration of the language laboratory with the classroom. In still another country I was expected to know about programed instruction and about source materials for teachers. Elsewhere, I spent five days reorganizing the library, not only in TESOL, but also in the social sciences. In another country I was asked to evaluate a series of textbooks being prepared, to make all the necessary changes, and to write a teachers' manual.

Another thing I have learned to do is to make my first lecture a statement of my beliefs in the field of linguistics. In that lecture I also note any area of controversy in principles or practices I am planning to emphasize throughout the seminar, with principles and practices which participants will either find in their readings or which they may have heard about at previous seminars. Incidentally, let me say that when I arrived in one country, I was met by the seminar director, who said he was sorry I would not be able to function because they had not had time to prepare a contrastive analysis of the native language and English, without which, he had been told, I could not possibly work. Many of you know my sentiments about this. Until contrastive analyses are available for all languages spoken in countries in which English is taught as a second language, it seems "unnecessary" to undermine the security of English teaching personnel by saying that one cannot teach effectively without a contrastive analysis. Participants appreciate learning about ways in which they can overcome the temporary lack of a contrastive analysis.

With relation to the lectures I gave, several practices seemed to be particularly effective. First, I always prepared a list of the lectures in advance and distributed them on the first day, giving a very brief summary of the contents. The participants were asked to add any item they wanted or needed to learn about. Second, before each lecture I placed key words or phrases at the board and pointed to them as I reached them in my talk. This not only constituted an outline of the main points I would cover, but also tactfully gave the participants the opportunity to hear and see the spelling of words with which many of them had no familiarity. Third, before giving a lecture for the day, I asked several students to summarize the high points of the previous lecture.

If we were pressed for time, I recalled some of the important points in my introductory remarks, relating the day's lecture to the previous one.

In some countries it is possible to give the entire lecture and then to ask questions or to elicit the participants' reaction. In other countries I found it necessary to stop every five or ten minutes to ascertain whether comprehension had taken place. Incidentally, when the questions asked after the lecture were of limited interest, I made arrangements to meet the participants privately and to give them individual help.

Although, as I noted before, I was not able to use much of the material which I had brought with me from the United States in my teaching demonstrations, I was able to use it in setting up exhibits of materials. The more elaborate commercial materials were added to the materials which the students had been asked to prepare in workshop sessions which I will now describe briefly.

Workshop sessions were extremely valuable from two points of view: (1) teachers overseas who do not have a tradition of working together in committees learned to pool and share ideas with their colleagues; (2) a wealth of materials for seminar distribution was prepared which would not have been possible had it not been evolved as a cooperative undertaking.

Workshop assignments which participants enjoyed and seemed to derive profit from in every country included the preparation of the following materials: (1) a contrastive analysis in the major features of sounds and structure of the native tongue and English; (2) where the native language lent itself to this, a list of true and false cognates; (3) reading passages adapted to two or even three levels of ability; (4) a picture file and language patterns to which each picture would make the greatest contribution; (5) instructional aids such as flannel boards and pocket charts.

In several countries several afternoon workshop sessions were devoted to the preparation of hourly teaching lessons based on the units of work in the school textbooks. At the same meeting participants were helped to prepare dialogues and newer types of pattern practice drills using the materials in their textbooks as the starting point. Incidentally, I found myself forced to call a moratorium on "mim-meming" the dialogue, a practice which some of the participants had read about and which is even more misunderstood abroad than it is in America.

By far the most appreciated single activity of any seminar is the live teaching demonstration. Without exception, final evaluation reports emphasize the value participants place on seeing theory translated into actual teaching practice. I usually try to give two types of demonstration. One type is given in a beginning level series so that sequence, continuity, and diminution of the need for the students' native language become apparent to the observers. These demonstrations are usually given to adolescents every day during the seminar.

The other lessons, usually four to ten in number, are demonstrations of procedures which the participants themselves have expressed a desire to see. These are usually given to adult, intermediate, or advanced level students, sometimes selected from among the participants themselves. Topics for these may cover a first day in a second-year class, an intensive reading lesson, or the contrast between the present perfect and the simple past.

Before giving the demonstration, I outline my lesson procedure and the rationale behind each step and indicate the relationship between this lesson and what may have preceded and what may follow. I find it necessary to emphasize that many procedures for teaching adolescents and adults are similar and that language games may be enjoyed by all language students. It goes without saying that in each demonstration we try to simulate the real teaching situation of the country we are in by duplicating their classroom conditions.

After about a week of watching me demonstrate, participants are asked to give brief ten-minute demonstrations on the presentation or practice of some language item or skill. These demonstrations are given in the small group sessions into which seminar participants are usually placed after the major lectures and demonstrations.

We found it necessary to prepare a list of topics for demonstrations which we assigned to participants. This was done to avoid duplication. In one group fifteen participants had expressed the desire to teach a lesson on how to tell time. A checklist for observers was also prepared in order to underscore desirable teaching practices and in order to elicit constructive recommendations for the improvement of specific techniques.

Many other activities are carried out at seminars which will undoubtedly be mentioned in the other papers. In this brief paper I have not yet touched those intangible aspects of conducting overseas seminars, which are infinitely more important than the tangibles to which I have referred: eating the food of the country and appearing to enjoy it; learning to understand and say several courtesy formulas in the native language; giving participants a sense of accomplishment and success; never being too busy to answer questions or to repeat the same material many times; not overdressing or underdressing; not spending too much money and yet buying some object of the country, no matter how crude. These are the activities which gain more acceptance for English teaching seminars than the best planned lectures or exhibits.

If we are to change English learning and teaching from passive or grudging acceptance to an eagerly pursued desideratum, careful attention should be paid at seminars to procedures *and* to attitudes, to tangibles as well as intangibles. The concern of the American specialist is with the end results. Eager and enthusiastic specialists transfer their enthusiasm to the participants in their seminars. Participants, in turn, cannot help but transmit this enthusiasm to their students.

It is only by engendering this desire to learn the language and, as an integral part of the language, the culture of English speaking peoples that we can hope gradually to remove the linguistic and cultural barriers which impede our communication with other people of good will in other parts of the world.

III. Some Key Concepts and Current Concerns

W. F. Twaddell
Linguists and Language Teachers

Robert Lado
Linguistics Plus in Foreign Language Teaching

Virginia French Allen
Basic Concepts in the Application of Linguistics

Betty W. Robinett
Application of Linguistics to the Teaching of Oral English

Charles W. Kreidler
Reading as Skills, Structure, and Communication

Peter Strevens
The Teaching of Other Subjects in a Foreign Language

J. Donald Bowen
Teacher Training for TESOL in Degree and Certificate Programs

Robert B. Lees
A Generative Grammar Approach

Martin Joos
The English Temporary Aspect

Alton L. Becker
Item and Field: A Way into Complexity

Joshua A. Fishman
Bilingual Sequences at the Societal Level

LINGUISTS AND LANGUAGE TEACHERS

W. F. Twaddell

Linguists on the Nature of Language

Let us begin with some professional history: about a quarter of a century ago, some linguists came out of the woodwork and made some comments about foreign language teaching. They reported that a language is a set of habits—a complex set of complex habits. Within a language, these habits interlock and largely reinforce each other. The reinforcement is considerable but not total: there are idioms which are not reinforced by other grammatical and vocabulary habits, and there are grammatical structures which are ambiguous as to analysis or indeterminate as to synthesis. But predominantly, there is a high degree of orderliness about the interlocking of habits within a language.

As between the habits of two languages, the non-reinforcements and downright conflicts are considerable. Comparison of two linguistic structures pinpoints the conflicts and reveals that they are often deeper than even an experienced foreign language teacher might have realized.

But more than any specific instances of such conflicts, the contribution of linguistic analysis to foreign language teaching was the revelation of the *fact* of conflict of habits and the *nature* of language as habits rather than intellectual manipulation. The complexity of those habits is such that it is impossible for a naive expert speaker to be aware of them, and the habits of listening and speaking are the deepest and most unconscious.

The evidence presented by linguistics during the past decades has been convincing. That evidence has pointed to the first stage of language teaching as a habit forming program. It was for the linguists to present the facts about language, then for language teachers to translate those insights and the inferences from them into practicable procedures and materials for habit forming practice.

Language Teaching on the Introductory Level

The result has been that today we are in possession of fairly successful devices and procedures for teaching the introductory level of a foreign language. The teachers have applied the linguists' diagnosis and developed ways to assure overlearning of model samples through mimicry-memorizing, dialogue practice, and short question-answer drills. The formation of habits of structural control is guided by pattern practices of several sorts, directed oral reports, and enactment of situationally varied conversations.

Vocabulary Learning on the Introductory Level

Throughout that introductory level the focus is on the truly systematic features of a language: the pronunciation system, the major grammatical structures as exemplified in word formation, phrase formation, and the basic sentence types. There is a general consensus in the profession that during this phase of habit formation the vocabulary[1] is to be rigorously limited. For vocabulary is the least systematic component of a language, and any increase of the learning burden during the habit forming stage would be an unwelcome distraction.

All very true. But our gratifying success on the introductory level has certainly outrun our performance at later stages of language teaching. Oral practice, we assert, provides a basis for good reading habits, by building habits of word grouping corresponding to the intonation stretches of speech and by assuring familiarity with the basic sentence types and the clues to grammatical functions (nouns, verbs, adjectives, etc.). But one essential device during this process, the limitation on vocabulary, leaves our students with the serious deficit of hopelessly inadequate vocabulary resources for any kind of real use of the language they are learning. Especially when the foreign language is to be used as a second language in educational experience, there is a need for an intermediate phase of massive and rapid vocabulary expansion, to meet the minimum requirements of reading and listening to lectures.

Vocabulary Needs for Use in Reading (and Audience-listening)

We note that reading per se involves greater demands on vocabulary resources than conversation: there is no actual environmental situation to provide clues, and there is no opportunity for emergency feedback questions as in conversation. (Listening to a lecture involves the same demands as reading, plus the additional handicaps of inability to reread and the probability of some acoustic noise interference.)

Linguists on the Nature of Vocabulary

If history is to repeat itself, with experienced foreign language teachers finding devices and procedures to apply the findings of linguists, let us first ask what the linguists can report on the nature of the vocabulary part of a language. Then we may hope that pedagogical applications may be found in due time. Whatever due time may be, it will be none too soon. When we foreign language teachers are being honest with ourselves and each other, we admit that somehow our more successful students have learned to read, but we don't know how to teach them to read.

"Meaning"—Polysemy and Heterosemy

The linguists report qualitatively on the nature of the relationship between words and meanings. A slogan which is both catchy and deeply true is "Words don't have meanings; people have meanings for words." Linguists have insisted on the arbitrary nature of any language: the relation between a linguistic signal and its meaning is a matter of habitual association by speakers and listeners between that signal and something meaningful in the situations in which that signal is used. (This is not a modern heresy; since Plato's *Kratylos* there has been no informed contradiction of this formulation.)

Indeed, for our purposes we may expand the slogan to say: "People don't have a meaning for a word; people have meanings for words." We are all able to cope with the word *table* in "She looked at the table and decided it wouldn't go well with her other furniture." "She looked at the table and quickly found the square root." In so doing, we are also coping with "go, well, square, root" for some of the meanings we have for each of those words. This phenomenon—having meanings and very often very different meanings for a word—is *polysemy,* multi-meaningness. Polysemy is extensive, even within one language. Not only does one person have different meanings for one word, but different persons will have different meanings for a word. (For a group concerned with English as a second or foreign language, the problem of polysemy has a special urgency because of the increasing modern English trend toward two-part verbs like "carry on, carry out, pick out, pick on, pick up, go with, go on, go down the line, go through with the job, see through [in at least two senses], make out, make up.")

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[1] Since the term "vocabulary" is used with a variety of meanings, some linguists nowadays are using "lexis" to refer to a stock of words. It is usually easy to understand this technical usage in any given technical context.

Just as important as polysemy for our purposes is the profound *heterosemy* when the vocabularies of two languages are compared. Except for deliberately monosemic inventions like "volt, CO_2, GNP, $\sqrt{-1}$ " there is very little one-to-one correspondence between the meanings speakers of one language have for any one of their words and the meanings speakers of another language have for any one of theirs. Both linguists and thoughtful foreign language teachers know that memorizing matched pairs of words in two languages is an educational atrocity, inhibiting the development of reading and speaking, and of use only as preparation for tests designed to check on such preparation for such tests.

Yet we know no complete escape from the device of glossing—supplying a word or words in a familiar language as a guide to understanding a passage in a less familiar one. This glossing may be in the form of a marginal or footnote gloss, or in an alphabetical end-vocabulary or bilingual dictionary. In any case, it is an emergency clue to the comprehension of a phrase or sentence, and at most a beginning of the learner's developing meaning for a word. A gloss is better than nothing, but no more than a starting point. The least valuable information about a word is a word in another language. To treat pair-matching as a learning objective or as a testing device violates what we know about polysemy and heterosemy.

Linguists are quite secure in reporting that polysemy and heterosemy are realities, and that they obviously bear on the pedagogy of massive vocabulary expansion. It is for language teachers to devise procedures in accordance with these realities and meanwhile to at least avoid rewarding the wrong kind of vocabulary learning—pair-matching between languages.

The Frequency-structure of a Vocabulary

Less familiar to language teachers than these qualitative aspects is the quantitative structure of a vocabulary. At one time or another, foreign language teachers have examined frequency lists with a view to pedagogical applications. Almost exclusively their attention has been fixed on the upper end of the frequency list—those words (or stems, or roots) which occur most frequently. Lists of the 600 most frequent, the 1500 most frequent, the 3,000 most frequent words have been taken as guides for the construction of introductory and even intermediate materials.

There has been very much less attention to the other end of the list, the low-frequency words. Yet this low end is vitally significant in any consideration of massive vocabulary expansion. It is a matter not so much of *which* words occur with low frequency as of the shape of the frequency distribution, so to say. Most foreign language teachers to whom I have put the question of frequency distribution have made the natural guess that there would be a bell-shaped curve representing a few very-high-frequency words, a large number of medium-frequency words, and a few low-frequency words. This guess is natural, but it is quite wrong.

Actually, the shape of frequency distribution is like a ski jump: a very few very-high-frequency words, a small number of medium-frequency words, and a very large number of very-low-frequency words.[2] Depending on the criterion for "word," the slope of the ski jump curve will vary, but it is always very steep at the high end and very extensive at the low end. A great majority of the vocabulary items in any body of natural speech or writing will occur very infrequently. We may paraphrase the remark attributed to Lincoln: "Speakers must love the low-frequency words, because they use so many of them."

If we define "word" as being a sequence of letters or sounds which is different from any other sequence, then we will find that a few dozen such words at the top account for a sizable fraction of the total text; these are the very few very-frequent words. At the other end, we find that nearly one half of such "different words" occur *once and only once* in the text. This tapering off of the vocabulary is a thoroughly attested fact, based on scores of statistical examinations of many kinds of materials in many languages.

What is significant for our problem of massive vocabulary expansion on the intermediate levels is how early in the list this tapering off sets in. Consider some recent frequency counts:

In the text referred to in footnote 2, the ten most frequent words (*the, of, and, to, a, in, that, is, was, he*) account for 246,114 of the 1,014,235 words of text. The most frequent word, *the*, has a frequency of 69,970: i.e., it occurs on the average about once every 15 words. The tenth most frequent word, *he* (frequency 9544), occurs once every 106 words. The fiftieth, *if* (frequency 2199), occurs once every 461 words. By the time we reach the one hundredth word,

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[2] For example, some statistics of a modern English text are described in a forthcoming Brown University Press publication, *Computational Analyses of Present-Day American English*, edited by Henry Kučera and W. N. Francis. The text is 1,014,235 words in length. Its total vocabulary (i.e., different words) amounts to 50,457, of which a great majority—42,540—occur only ten times each or less. (N.B. that a frequency of ten in this text corresponds to an average occurrence less than once every hundred thousand words of text.) The figures for this low end of the frequency list are:

Frequency	*Number of words with that frequency*	*Frequency*	*Number of words with that frequency*
10	561	5	1822
9	694	4	2464
8	826	3	3946
7	1118	2	7231
6	1280	1	22598

down, we find a frequency of 895: i.e., *down* occurs on the average of once every 1133 words. Thus, even this close to the top of the frequency list, we are already noting a sharp tapering off.

J. A. Pfeffer has recently reported on a frequency count of modern spoken German.[3] His list uses a broad definition of "word," including as one item all forms of any noun, adjective, or verb. Even so, we note the same tapering off very close to the top. His one hundredth most frequent word occurs once every 772 words of text; the six hundredth occurs once every 10,258 words of text.

Pfeffer's data cover a text over 595,000 words in length, in which nearly 25,000 different "words" appeared. A text of this size is not enormous; probably any educated person hears and reads many times this amount every year. How has he acquired the 25,000-word vocabulary to do it? How can a learner of a foreign language be guided to acquire even a fraction of this vocabulary?

The Vocabulary of a Language Learner on the Intermediate Level

The relevant conclusion from these quantitative properties of a vocabulary is the hard saying that at the beginning of intermediate language study the learner is faced with a disastrous shortage of vocabulary resources, and this shortage will continue through and beyond the intermediate level. And we simply cannot predict *which* vocabulary items the learner will need for the next page of reading or the next minute of listening: the fact is that he will encounter several very-low-frequency items, including some that he cannot possibly have encountered before. It is futile to select in advance the, say, 6,000 words to be learned during the intermediate level as being the most useful for his future reading and listening. At the level of the 6,000th most frequent word in a frequency list, we are far far out on the low-frequency end of the list, where the predictability of occurrence or recurrence is very small indeed.

Resources and Skills

However grim this picture is, it is real. We have to face the fact that our students will not have adequate vocabulary resources until after many many hours of conversation and many hundreds of pages of reading. The resources are scanty; they must be compensated for by skills. Skills can be taught; resources must be acquired. The record of thousands of learners who have somehow acquired the vocabulary resources needed for using a foreign language shows that it can be done. But we may as well honestly admit that it is the students who have acquired the resources through developing their own skills, without too much effective help from us. And the other thousands of learners who have not developed the skills or acquired the resources are on our conscience. It is wholesome to consider that possibly the successful ones succeeded without essential guidance from us—perhaps in some cases despite misguidance from us.

What are the skills which compensate for a lack of resources, in vocabulary expansion? Clearly not a gift for memorizing definitions in one's native language, nor bilingual glossings in a foreign language. Those processes would have been far too time-consuming to provide us with our vocabulary resources in our native language or in any foreign language in which we have become competent.

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[3] *Grunddeutsch. Basic (Spoken) German Word List* (New York: Prentice-Hall, Inc., 1964).

We must have acquired our meanings for words in other ways. What the two relevant findings of linguistics—the qualitative fact of polysemy and the quantitative fact of very numerous low-frequency items—point to is a skill in reading and listening. Possessors of this skill are those who are somehow adjusted to encounter low-frequency (often quite unfamiliar) vocabulary items and to somehow have a meaning for them in the context in which they are encountered.

Panic or Infer!

Clearly, that last phrase is the crucial one. The reader or listener encountering a "new word" can panic, especially if he has been trained to panic. Or he can have acquired the skill of inference from context. In the latter case, he uses what is not unfamiliar in the context to convey a meaning (not necessarily complete or precise) of the phrase or sentence. Whatever meaning he attributes to that phrase or to that sentence determines a meaning he can begin to have for that new word.[4]

Grammatical and Pragmatic Inferences from the Context

If a reader or audience-listener habitually controls the basic grammatical structures (as he very effectively does in his native language and as he does to some extent in a foreign language he is studying), the sheer grammar of the text environment of a "new" word significantly restricts the kind of meaning he can have for it in that context. If the grammatical environment is most appropriate for a noun, it is inefficient for him to consider a meaning appropriate to an adverb. If the new word, probably a noun, is probably the subject of a verb normally used with animate-human subjects, the scope of inference is further narrowed, and it is unlikely that the new word belongs in a meaning class with such nouns as "logarithm, prayer, bilabial, autumn."

In short, the basic skill in vocabulary expansion is the habit of guessing from context, using both grammatical and pragmatic clues. This habit appears to be normal in listening to and reading the native language, for those who really listen and read. It is not automatic in dealing with a foreign language, especially in the transition from the introductory level (with its necessarily controlled vocabulary) to and through the intermediate levels toward real use of the foreign language. On that introductory level the learner had been given every help to have meanings for the new words as they were introduced cautiously and underwent saturating recurrence. The skill of sensible guessing was not called into play. But as the learner moves from the protection of a rigorously controlled vocabulary into something like a real use of the foreign language, the skill of sensible guessing becomes a major teaching objective.

Linguistic Findings and Vocabulary-building Pedagogy

Here, I would suggest, lies the present gap between linguistic insights and pedagogical procedures. Just as the experienced teachers were able to translate the reports about the habitual nature of language into habit forming overlearning on the introductory level, they are now called on to apply the consequences of polysemy and the frequency distribution on the intermediate level of language learning. The targets are clear: learners must develop skills to compensate for scanty resources. The skills involve freedom from panic at encountering an unfamiliar vocabulary item. Ergo, the teacher must not pounce upon such items; a pouncing teacher produces panic or defensive boredom.[5] The skills involve sensible guessing at a useful meaning for the item in its context: this sensible guessing is funneled by grammatical possibility and pragmatic probability. The guessing must tolerate vagueness and the chance of misunderstanding. (How many native speakers of English have guesses at "osprey" that are vague as to color and size and shape, and perhaps as to membership in the animal, vegetable, or mineral kingdoms—without any calamitous impairment of their listening and reading ability?) Ergo, a teacher must not institute searching inquiries designed to punish vagueness or even misunderstandings in a learner's buildup of meanings for words.

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[4] In an earlier passage, the reader encountered: . . . deliberately monosemic inventions like "volt, CO_2, GNP, $\sqrt{-1}$." The reader had to make an inference about "monosemic" from context, including earlier "polysemy, heterosemy"; and probably every reader did.

These negative teaching procedures do not take us very far, but they are likely to be hard sayings for teachers at the intermediate level of foreign language instruction. "Do not focus on words that are likely to be unfamiliar; do not punish guesses which are vague; punish only guesses which are purely random, and then practice correctively with guided guessing using the available grammatical and pragmatic clues in the context." But a hard saying is not an invitation to abdicate responsibility. Many foreign language teachers have made the difficult transition from a grammar-translation method to habit forming teaching on the introductory level, with materials and procedures developed by their colleagues in response to the challenge of linguistic findings. Everybody knows that it is a more strenuous kind of teaching. But our students learn more. Thirty years ago foreign language learners spent years and semesters in classrooms and were unable to speak, understand, read, or write in the foreign language. Now those who have been guided through a modern introductory level are able to do some speaking and understanding.

The time has come to move up one level and guide an increasing proportion of learners at the intermediate level to an ability to read and to understand speech of a considerably more sophisticated kind, approximating a genuine use of the foreign language.

Pessimism is not in order. The language teaching profession has done it before on the introductory level, and we can do it again. Teachers of the "commonly taught languages" are beginning to produce materials to reward the virtue of sensible guessing and tolerable vagueness and to punish (or at least not reward) the vices of panic and slavish dependence on word matching. But it is only a beginning; and once again we need an application of linguistic findings. We need practical classroom procedures and devices, practical teaching materials on the intermediate level, to develop the skills for massive vocabulary expansion.

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[5] There are implications here for any attempt to design programed learning courses to develop reading ability. Prompt correction of every "mistake" is just what the vocabulary-expanding learner should not experience.

LINGUISTICS PLUS IN FOREIGN LANGUAGE TEACHING

Robert Lado

I. A Scientific Attitude

Twenty years ago I became fascinated by linguistics. It suddenly threw new light on my first and second languages, Spanish and English. It was like discovering hidden treasure. It explained many things that had been hidden and vague. Some were little vexing details such as when to use *in* and *on*. Had I arrived in or on 1939, in or on Wednesday, in or on March? When was the plural pronounced /s/, /z/, /iz/? The spelling did not always help. And intonation, what a wonderful clarification of the use of the high, low, and mid tones of the voice, and of the differences between Spanish and English.

Others were major things. Language is arbitrary but systematic. The spoken language is not a poor expression of writing. It was writing that represented the language imperfectly. Each language had its own system of sounds, stress, intonation, grammar, and vocabulary: a system—not a collection of items.

And linguistics had the romance of a new science. My first contact with it was through three stars—Charles C. Fries, Kenneth L. Pike, and W. Freeman Twaddell, all pioneers. All three were bringing to language more than linguistics. Fries had taught Greek by an oral approach, and his *American English Grammar* had debunked some of the prevailing false notions about English. He was in the midst of developing the Intensive Course in English which has had such far-reaching influence on all foreign language teaching, including Latin. Pike was moved by religious dedication as well as scientific interest and had just analyzed English intonation structurally for the first time. His books on phonemics and tone languages were in the works. And Twaddell had been part of the intensive language program of the Armed Forces under the ACLS and ASTP. He was a *linguist* and a teacher of German.

Later in these last twenty years, I went on to make some contributions of my own, and it became increasingly clear to me and to others that there was more to language teaching than linguistics. Psychologists had been studying the laws of learning. Cultural anthropologists were studying the structure of cultures. And then there was motivation, and human values and beliefs, and great achievements of the human spirit that nations were proud of and that influenced human actions.

And I saw no conflict between the linguistic information that had helped me understand Spanish and English better and all these other things, including very definitely the appreciation of Spanish and English poetry, as in the lines:

> No me mueve mi Dios para quererte
> el cielo que me tienes prometido

ni me mueve el infierno tan temido
para dejar por eso de ofenderte.

or

el ruido con que rueda la ronca tempestad

or

The woods are lovely, dark, and deep,
But I have promises to keep,
And miles to go before I sleep,
And miles to go before I sleep.

In fact, I found that one helped the other.

So I broadened my position from a purely linguistic one to one involving linguistics plus, or a scientific attitude. Because of my contact with psychology and the obvious relevance of it, I worked with psycholinguistics chiefly, although there are social, anthropological, and many other aspects that cannot be neglected without peril. Having moved to a broadly scientific attitude, a prestige position today, just what does this mean?

Scientific does not mean perfect or omniscient. A scientific attitude welcomes scientific information if it is relevant; it searches for a theory and set of principles which are internally consistent and not in conflict with observed facts. It measures results and is impersonal in the sense that it can be discussed on the basis of objective evidence. And it is open, permitting cumulative improvement as new facts are known.

The scientific position that can be mapped out today has to be based on scientific linguistics for the description of the language, and on psychology for the process of learning, the facts provided by literary criticism when we teach literature, at least a psycholinguistic theory of second-language learning, a set of principles based on this theory, and objective evidence of results insofar as they are known.

A scientific position is not antihumanistic since scientific information should not be applied without reference to goals and conditions. If the goal set for teaching the foreign language is chiefly humanistic, a scientific approach is then geared to achieve that goal.

In any case, each time that you and I teach a class, each time that we come in contact with the student in a learning situation, is and should be, in fact, an artistic performance, unique and nonrepeating, never to occur again. No teacher should even attempt to teach exactly as any other, because the artistic component of teaching involves the personality, emotions, and esthetics of the teacher, and one can teach best when he uses these human qualities to the fullest.

On the other hand, one cannot ignore the facts of the subject he is teaching, the characteristics of the human beings he is teaching, their laws of learning, their motivation, and the goals and conditions involved.

A glance at the medical profession should be revealing for us at this time. The medical doctor knows physiology, anatomy in great detail (seemingly far beyond what he will ever need to treat patients), chemistry, bacteriology, and pathology, yet in his practice he does not employ any one of these to the exclusion of the others, nor does he ignore the manner of his contact with the patient. Armed with the knowledge of the medicines and treatments that are effective for each disease, he applies them in the manner most appropriate for each case. When a medicine produces undesirable side effects, he suspends it and substitutes another. He must do this in accord with a standard scientific knowledge and not according to his whim and fancy. He cannot choose to ignore bacteria as a cause of disease, nor allergies, nor mental disorders. Before he prescribes a drug, he expects information on controlled experiments showing its effectiveness and safety.

II. A Theory

Such an attitude calls for an explicit theory. What are some of the features of that theory? Some are old and trusted elements: all language learning occurs through experience, except for analogic creations and generalizations which combine previous experiences into new sequences according to the syntactic rules of the system. This is confirmed in part by the fact that children learn the language that is spoken around them. A Japanese child raised in an English speaking environment learns English rather than Japanese, and vice versa.

Others have just been stated and may or may not be accepted by all. For example, the distinction between what I call total and partial experiences and set: Each time that we speak or listen under a normal communication set, that is, with attention focused on the content at conversational speed, we have a total language experience. When total experiences are not possible because of unfamiliarity with the language, we fall back on partial experiences; that is, we break up the utterance into parts and repeat a part, or we slow down the speed, or we concentrate on the expression or some part of it. Learning does take place by partial experiences: they permit the subject to manipulate separate elements with less attention so that a total language experience can then be attempted.

Others come from psychology with more or less adaptation. Attention, the capacity to perceive some things, events, qualities more clearly and consciously than others in a field, is a factor in language learning. Before learning occurs, attention has to be focused on every element of expression and content and their association. Since attention is limited as to the number of items that may be held simultaneously under it—George Miller gives evidence that seven items or groups of items represents the general capacity of adults—it follows that learning occurs when attention can be shifted to the thread of the message instead of the mechanics of the language.

When new material is difficult to learn because of conflicts with previous habits that operate under similar attention sets, learning requires that attention be focused temporarily on the new expression—a partial experience—to reinforce to a point where it can be operated accurately in the total set.

Other features are based on both linguistics and psychology. The notion of transfer with resulting facilitation or interference remained vague and remote in psychology. In applied linguistics the notion has been made very specific, and it has been tested repeatedly in doctoral dissertations. The elegance of this work has not been fully realized by psychologists, but it has certainly been productive in language teaching and testing.

Still others go beyond linguistics and psychology. We must teach the content of the target language—the grammatical and lexical meanings—whether or not linguistics has yet produced a satisfactory semantic theory or procedure. And we will use motivation in our own *ad hoc* manner even though psychology has not given us much on human motivation and language learning outside of the work of Wallace Lambert and his associates.

Human motivation is infinitely more complex than animal motivation. Psychologists have motivated animals by deprivation, i.e., withholding food for twenty-four hours, or by electric shock. They work with the widest range of animals, from the planarian worm to the higher apes, and to a degree even with human beings. But humans are motivated more by other things. Thus, a wealthy person having all his apparent needs fully satisfied may by an act of his will choose to leave all his comforts and wealth and go to some remote and primitive society to work for his fellow man under great hardships. And in the process, he may learn a strange language in short order when earlier in school he may have flunked French, Spanish, or German.

And of course not every psychological experiment or theory and not everything in linguistics need be relevant to a scientific attitude in language teaching. The learning experiments with planarian worms are most interesting. These primitive and simple animals do not naturally respond to light. Thus, a light bulb placed about six inches from them elicits no reaction, but they do react to electric shock by a body contraction. Experiments produced learning—conditioned responses—by subjecting the planarian to electric shock at the same time that it was exposed to a 100-watt electric bulb. After 250 repetitions the presentation of the electric light without the shock produced the same body contraction. What is even more interesting, when the planarian had been cut in two and when the tail part had evolved a new head of its own, the two planarians, the head part and the tail part, remembered the reaction to the light and exhibited body contraction without any new practice. This is very interesting, but it is hardly essential for a theory of second-language learning and teaching, though we may at times have felt that such treatment should be given to some of our charges.

III. Some Principles, Implications, and Applications

Given the student and the language as they are, teaching consists in bringing the language to the student in the most effective way for whatever goals are set. To do this there is need to state certain rules, statements, or principles that will be sufficient to the task. They will be subject to change or elimination as new scientific information becomes available, of course.

Speech before writing. We teach listening and speaking first, reading and writing next. This principle is the basis for the audiolingual approach. From linguistics we know that language is most completely expressed in speech. This principle does not imply that we should teach only audiolingual mastery or that reading and writing are not important. It does imply that deciphering written material without knowing the language patterns as speech is incomplete, imperfect, or inefficient.

Basic sentences. We have the students memorize or overlearn basic sentences. This principle, advocated by linguists, has a strong psychological justification not dealt with in published experiments but tested repeatedly otherwise.

Students have a shorter memory span in a foreign language than in their native one. When examples or models are given in the foreign language, they may not be heard correctly or they may be forgotten in seconds. The student cannot use such examples to understand the grammar or to generate other sentences by analogy because he does not remember them. The extra effort needed to memorize dialogues in a foreign language enables him to use them as models and to proceed with further learning.

Patterns as habits. Establish the patterns as habits through pattern practice. Knowing words, individual sentences, and/or rules of grammar does not constitute knowing the language. Talking about the language is not knowing the language. Students who do this will not be able to generate or understand sentences at normal conversational speed, and they will not be able to use them in total language experiences or sets. By establishing the patterns as habits they will be able to shift attention to the message and approximate normal use of the language by natives and others who know it.

Teach the problems. Problems are those units and patterns that show structural differences between the target and native languages. This is based on the psychology of transfer made more specific and elegant in applied linguistics. The disparity between the difficulty of such problems and the units and patterns that are not problems, because they function well when transferred to the target language, is much greater than we suspect. These problems will often require conscious understanding and direct attention in partial experiences plus gradual shifting to habitual manipulation in total experiences.

Language practice versus translation. Translation is not a substitute for language practice. The process of translation is different from and more complex than normal language use. In order to translate when the two languages are not fully known, the student is forced to reduce the operation to an unnecessarily complicated series of partial experiences. The good students do not need to translate, and they are forced to do it when such activity is substituted for language practice.

Immediate reinforcement. Let the student know immediately when his response has been successful. Thorndike proved experimentally that blindfolded subjects did not learn to draw four-inch lines even if they drew thousands of them, so long as they did not find out when they had succeeded.

Attitude toward culture. Except in cases of incompatibility, impart an attitude of sympathetic understanding toward the people and their language and culture. Wallace Lambert found that students with such an attitude learned more than those who had a utilitarian attitude toward the language or a disinterested or negative attitude toward the culture and its people.

This implies also a responsibility: we should not attempt to impart a disdainful attitude toward the native language and culture of the students. Linguistics and anthropology are clear with regard to the worth of each. Our goal should be to make the pupils bilingual and bicultural rather than merely having them switch language, culture, and allegiance to their traditions. We may not wish to use the native language in class in order to achieve better results, but this should not imply that we wish to have our students forget their native language.

A recent article quotes a Cherokee Indian, Frell Owl, who after graduating from Dartmouth served for forty years as an official of the Bureau of Indian Affairs. He said, "We were taught to dislike our culture and our language. In school, we were beaten for speaking Cherokee." The article goes on to say that perhaps the shadow in Frell Owl's voice comes from the Indians' wretched history.[1]

We are the most powerful nation on earth. The insecurity and the immaturity that make us want to eliminate native languages other than English, or to look down on cultural traditions other than those we may superficially consider to be American, should have no place in the heart of Americans and certainly not in the heart of a teacher: it is not justified, and it is not necessary or advisable for our national survival and development.

Such thoughtlessness can only antagonize the foreign visitors who come to study in our midst. They of course will remember their feelings when they return to their native lands. But those who were born in the United States or who have adopted the U.S. as their country of citizenship have no such recourse. They will only shrink or withdraw from full participation in the life of the country.

And who are they? I was struck with the experience of John F. Kennedy when he began to gather material for a book on our immigrant groups. The more he searched the more he realized that all of us were immigrants or descended from immigrants. Before the War of Independence, in pre-Revolutionary days, Spanish, French, Dutch, Jews, Welsh settled in America. Germans, English, Swiss, Poles, Greeks, Slavs were in the United States before independence. They fought for our independence as generals and soldiers, as nurses and medics. Then came the great waves of Irish, Germans, Scandinavians, Italians, and, with them, Danes, central Europeans, and all the rest. No matter what cliché against some other culture or language we echo, it is likely to find its mark in someone who is as American as ourselves and who will withdraw or suppress in public that part of his personality which is part of him. And the United States will be poorer for it.

And as a final principle, *teach primarily to produce learning* rather than to please or entertain. This principle is based on the observation that classes which entertain most are not necessarily the most effective. It is based also on an analogy with medical science. In developing a new drug, for example, no thought is given to whether it has a pleasant taste or not. Results and absence of side effects are the decisive criteria. Once a drug is found effective, it is put into palatable form, but effectiveness comes first.

In language teaching we have not yet reached this stage of scientific sophistication. It is common to discuss materials and techniques on the basis of whether or not the student or the teacher finds them interesting, without sufficient regard for effectiveness. In a scientific approach the amount of learning outweighs interest. Once the effectiveness of a technique is demonstrated, working to make it more palatable, more absorbing, more interesting is in order, but not before, and certainly not as a substitute for effectiveness in terms of learning.

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[1] See John Keatas, "What Does the Indian Want?" Condensed from *Venture* in *Catholic Digest*, March 1965, p. 20.

BASIC CONCEPTS IN THE APPLICATION OF LINGUISTICS

Virginia French Allen

Recently, during a television interview, the chairman of the board at RCA prophesied a day when people all over the world will own TV sets that can be tuned in on events occurring anywhere on earth. With a twist of the dial a person in Tehran will be able to look in on a basketball game being played in some Chicago high school gymnasium, or a Kansan can catch a glimpse of lamas in a Himalayan monastery celebrating New Year's in Tibet. Presumably in that electronic millenium there will be TV cameras installed at all times everywhere, even in ordinary classrooms. And when that day arrives, teachers at conferences will be able to keep tuning in, between speeches, on actual sessions going on all over the globe. I think that could be quite a healthy thing. Consider what it might do for our present discussion, to be able to sit back right now and see and hear English being taught to speakers of other languages in New York City, in Detroit, on a Navajo reservation, and even in Tokyo, Rangoon, and Beirut. Between our glimpses of these actual classes, we would be able to address ourselves in the most practical terms to the question: How might linguistics help?

Well, we can't use global TV to eavesdrop on class proceedings during the course of this discussion, but we can at least use our imaginations to conjure up a picture or two of students in action. Here is picture number one.

Somewhere in the world at this moment, a teacher is introducing a group of children to the letter *e*. The teacher is using a book with a number of clearly drawn illustrations and quite an interesting assortment of words. Its preface assures the reader that the child who uses this book "progresses surely and smoothly in the mastery of the alphabet." Here I really am quoting, for though the class is just imagined, the book exists; it was published in 1963. Let's turn to the page for *e*.

At the top of the page we see three pictures: the first shows an ear, the second an eye, the third an egg. These are labeled, respectively, *ear, eye,* and *egg*. Centered on the page, and printed in red, is the letter that is introduced in this lesson: *e*. The middle portion of the page is lined with rows of printed *e*'s, interspersed among letters that children have seen before: *a, o, b,* and others. The culminating activity is presented in the bottom fourth of the page. There, next to a large picture of a human eye, one finds the outlines of a printed *e*, which the child is instructed to color (or *colour*, since this is not an American book). So much for *e*; the next page goes on to introduce *h*.

Before speaking of linguistic concepts bearing upon such a lesson as this, we ought to ask what the teacher would hope the lesson would accomplish. One aim should surely be to give the children some clear notion of what the letter *e* commonly stands for when it is found in an English word. Do we adult native speakers of English have any such sense of what to expect from a word spelled with *e*? Certainly we have. Experience tells us that *e* in the combination "consonant plus *e* plus consonant" usually stands for the vowel sound in the middle of *get* or *bed*. Hence if we were to find on our doorstep a scrap of paper inscribed with words spelled *t-e-t, l-e-p,* and *k-e-b,* we could readily say "tet," "lep," and "keb" aloud, even though we had never seen them before and did not know their meaning. Experience with the writing system of English has taught us what to expect.

Experience has also given us other fairly reliable expectations with regard to the symbolic system in which *e* is a factor. Experience has led us to expect that *e* will be pronounced like the middle sound of *seed* or *beef* when the *e* is followed by another *e,* either directly (as in *free* and *sleep*) or with a single consonant intervening (as in *Pete*). That is to say, we adult native speakers have grasped the *system* within which the letters of our alphabet work. Though we have had to learn to resign ourselves to the fact that many words defy the system, we nevertheless act upon the knowledge that there *is* a system. We depend upon our familiarity with that system when we meet new words in our reading of English. We can go into a supermarket, look at the ever widening rows of breakfast cereals and detergents, see the new brand names, and pronounce them as their makers intended them to be pronounced, even if we have never heard them said before. We can drive through the United States, see on a signpost the name of a town, and pronounce it if it is a name of English origin, even though we have never heard the name pronounced before. We can do these things because our experience with the language has taught us something. It has taught us that the English way of putting words on paper has some systematic sense to it. We have absorbed the system well enough to be able to use our knowledge when we need it, even though most of us could not explain what we know. We have not made the system an object of analytical study, and we would not know how to describe the way it works.

That is where the linguist comes in. The linguist has made it his business to study the system objectively, taking nothing for granted, trying to find out how the components of the network fit together, how the gears mesh. He is interested in the language as a system, in its written representation as a system; and what he learns by observation he then describes.

His role as linguist stops there. As linguist he cares nothing about teaching children to read or write the letter *e*. Nevertheless, most linguists have opinions, as other people do. And in the opinion of linguists, the lesson I have described would look like a very unpromising way of helping children grasp the writing system within which the letter *e* is used. Why? Because that lesson does very little to start children on the road to a realization of what English speaking persons can expect of words spelled with *e*.

In classes where that *eye-ear-egg* lesson is used, the *e*-words that the child sees and copies suggest no system. They suggest that there is no connection whatever between the way words are written and the way they sound—a fact that would be terribly discouraging if true. We have already seen it is *not* true: there *is* correspondence between English sounds and the letter combinations used to represent them. In terms of the linguistic concept of *language as a system,* that *e* lesson, then, teaches children a fact that is not only discouraging but false.

Isn't it true that *e* does occur in the word *eye* (and in the words *ear* and *head,* too)? Yes, but it is also true that cars sometimes go when the traffic light is red. Yet the adult who undertakes to teach children about traffic lights is careful to call their attention to the fact that traffic *stops* when the light turns red. The adult does not say: "See? That car stopped when the light turned red; that woman kept on walking; that police car drove right through." Such a lesson would never help the children make sense of the traffic control system. Soon enough a child learns about the exceptions; at the outset he needs to be given a clear view of the dominant pattern at work.

I have been saying, then, that a concept basic to linguistics is the concept of *system*—that in linguistic terms, a language is a *system* of symbols. It is a system that every native speaker and every fully bilingual speaker has grasped and absorbed, so that he can use it for interacting with others who share his knowledge of ways in which the system works.

Language is, however, a system most people (even most *teachers*) have not learned to analyze with scientific objectivity. Consequently most of us must depend on the linguists to ring the alarm bell when something we do or say is likely to interfere with our students' perception of the system by concealing some of its crucial features rather than revealing them. Of course it would be better if the alarm bell never had to be rung—if we could use textbooks whose authors had learned enough from linguistics to avoid pitfalls like those we have noted on the page for teaching *e.* Luckily, books by "linguistically oriented" authors are not nearly so rare as they used to be; several of them are being mentioned at this conference, and others are listed in the bibliography recently prepared by a committee within the NCTE. Such books can do much for children who are beginning to read and write English.

Naturally this awareness of language as a *system* is needed all along the line, in the upper grades as well as in elementary school, in learning grammar as well as in learning to read and write. Let's tune in on picture number two, a class where a teacher is introducing certain English verbs. This is a teacher who believes in performing actions to accompany her words. I am going to act out the lesson as she is acting it out right now in this imaginary class:

TEACHER (while sitting at her desk): I sit at my desk now.
(while standing up): Now I stand up.
(while walking to the door): I walk to the door now.
(returning to her desk): Now I return to my desk.

Once again the question is: What does this procedure do to students who are trying to grasp the system within which verbs like *stand* and *walk* are used? If a teacher says, "I walk now" while she is performing the act of walking, are the students being helped to use English the way it is normally used by English speaking people? Suppose the students are shown a picture of a boy sitting on the grass, and the teacher says: "The boy sits on the grass." How long will it take these students to learn (in spite of the teachers) that within the system actually used by English speakers in the real world, a person would probably say—in describing this picture—"The boy *is sitting on the grass*"? Until the students have grasped the distinction between *sits* and *is sitting* or between *walk* and *am walking,* through hearing and saying sentences in which these forms are used appropriately, they will have failed to grasp one of the basic facts about the verb system. An acquaintance with linguistic studies can help teachers sharpen their own awareness of how the system works, in their own usage as well as in the usage of other native speakers. A teacher with that kind of awareness says "I am walking to the door now" while walking to the door. She puts the so-called simple form of the verb into a different kind of example sentence: "I walk to school every day" or "I often walk in the park on Sundays." Such examples illuminate the system of English verbs rather than obscure it.

There are other important uses of linguistics, of course. Linguists can help a teacher understand why his students make the mistakes they make. Many of the misdeeds of our students that seem like evidences of carelessness or perversity become understandable and, therefore, possibly curable when one has examined the students' own language, along with English, as linguists do.

Then, too, since learning a language involves getting to know and to use the vast range of resources available within that language, there is another useful service linguistics can perform. Having made an unprejudiced inventory of the resources of English, having sorted them out and classified them, linguists can help teachers recognize resources they themselves have habitually used and taken for granted without noticing what they are.

Perhaps the most useful thing about linguistics, from the standpoint of a practical teacher, is that linguists are generally concerned with the *habits* of the language-using community. Most linguists are less interested in the oddities of individual usage than in the customary, habitual patterns native speakers usually employ. Much as the ornithologist studies the habits of birds—the nesting and mating habits of robins, the habitual migratory routes of herons or cranes—so the linguist studies the characteristic habits of English or Spanish or French. This concern with language habits can prove useful to those of us who teach, because linguistic materials offer us a detailed inventory of the types of sentences our students must learn if they are to approximate the English of native speakers. These sentence types include patterns used for making statements, patterns for asking questions, short-answer patterns, patterns for explaining, exclaiming, describing, and so on. Equipped with an ability to construct these *types* of sentences, the student can then fit different vocabulary words into the parts of the sentences, and so be able to communicate in an endless variety of situations. This explains the importance to us teachers of the linguists' concern with patterns or molds or types of utterances that work together within the *system* of symbols called English.

APPLICATIONS OF LINGUISTICS TO THE TEACHING OF ORAL ENGLISH

Betty W. Robinett

Many of us have had the experience of sitting in the back of a classroom observing a teacher and saying, "If he knew something about linguistics, he wouldn't do that." It is true that after a teacher becomes linguistically oriented, there are certain things he just won't do, and what is more important, he knows why he won't do them. Linguists will all agree, I think, with Robert A. Hall's recent statement that "there is . . . no 'linguistic method' of language teaching or learning; there is only a linguistic approach, based on the facts of language themselves."[1] The individual teacher approaches the classroom armed with these facts and applies this knowledge constantly. It becomes, if not a way of life, at least a way of teaching. What these facts are, these assumptions that linguists make about language, and how they affect teaching practice is the topic of this paper.

The assumptions which are the basis for this paper are adapted from those described by W. Nelson Francis in an article entitled "New Perspective on Teaching Language"[2] and by Charles C. Fries in an article entitled "The Implications of Modern Linguistic Science."[3] These assumptions will be examined in the light of their application to the teaching of oral English.

First, language is a set of oral symbols. The symbols are not things themselves but represent things; that is, the expression *dog* is not the animal but is merely the way we talk about that animal in speaking English. The only way a student can learn that *dog* relates to the concept which he carries around in his mind is to relate that particular set of sounds in that particular order to the idea. This is done by relating the symbol to a situation in which this idea occurs. Thus symbols should be learned in situations, not in lists. This is especially true of greeting formulas, which in themselves do not mean what the sum total of the words used to form them may lead one to believe they should mean. *How do you do?* or *How are you?* if taken literally, might result in detailed answers which no one wants to hear. But, when they are taught as formulas through the use of dialogues or conversations, they are very effectively learned. The answers to these formulas or greetings may be quite meaningless as far as the real life situation is concerned: *Just fine,* as an answer to *How*

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[1] Robert A. Hall, Jr., "The Linguistic Approach," *The Florida FL Reporter*, III, 2 (January 1965), 5.

[2] W. Nelson Francis, "New Perspective on Teaching Language," *The Commission on English 1962 Summer Institutes for English Teachers* (New York: Modern Language Association, 1964), pp. 10–13.

[3] Charles C. Fries, "Implications of Modern Linguistic Science," *College English*, VIII, 6 (March 1947), 314–320.

are you? may be an outright lie. You may feel terrible, but you are not going to burden someone else with your troubles. The point here is that students must learn the symbol which fits the situation by learning the symbol in a situation and not from a list or through translation. Contextual teaching can thus revolutionize the teacher's approach; witness the popularity of simple dialogues as a teaching device.

Symbols change, too. What was appropriate yesterday may not be appropriate today or tomorrow. The teacher must be alert to such changes. What the older generation called a *victrola* is a *record player* today. What used to be called a *pocketbook* or *purse* is now most generally advertised as a *handbag.* The teacher must constantly update language material, remembering that symbols must keep pace with the changing ideas of people and the changing outside world.

A clear distinction must be made between the oral symbol and the written symbol. Language, as the linguist conceives of it, is completely oral. Writing is not language; it is merely another symbolization of the primary symbol: the oral representation. The written word spelled *d-o-g* is a graphic symbolization of the orally produced /dog/, which in turn symbolizes the four-legged domesticated animal. Sometimes the written symbol interferes with the learning process because teachers have come to attach such importance to the written representation of the word. The admonition to "pronounce all the letters clearly" is an example of this kind of misunderstanding. Since the words *sense* and *cents* are spelled differently, many teachers assume that there must be a difference in pronunciation. Or since *calm* and *palm* contain an *l* in the written form, teachers sometimes feel that the *l* must be pronounced. English speaking students, by the dozens, revealing their linguistic innocence, have quite seriously claimed that they always pronounce the *l* in these words.

If the teacher clearly understands that speech comes first and the written symbolization second, much time can be saved. It is always better to present the material orally first; then the student will have the oral model to follow before he sees the written word. This will sometimes circumvent the problems of "spelling pronunciations." For example, if the word *law* is written on the blackboard before it is practiced orally, many speakers of other languages will undoubtedly pronounce it /law/. But if it is practiced orally first, such a vowel pronunciation may be avoided.

The same thing is true of the relationship between the question mark and intonation contours. In the minds of many, the use of a question mark automatically correlates with a rise in the pitch level of the voice. Thus, when the student is confronted with the written form of a sentence punctuated by a question mark before he hears it uttered, his first reaction may be to use the rising intonation. This could result in Where is he go|ing? instead of Where is he |go|ing? or It's |cold| today, isn't |it? instead of It's |cold| today, isn't |it? As a matter of fact, Fries found that in ordinary conversational speech almost 62 percent of the yes-no questions such as *Is it bigger than an automobile?* or *Do you work inside?* were produced with a falling intonation. But what is even more interesting is that if a question was uttered twice, "in many of these instances the intonation pattern of the question as uttered the second time was the opposite of that used the first time."[4] Thus it is absolutely necessary that students learn to control intonation, and, of course, this means that teachers must have perfect control first. Avoidance of the written symbolization in the early stages of language learning, at least before the oral pattern has been set, will help overcome this tendency to allow the written symbol to interfere with the accurate production of the spoken symbol.

The second assumption of the linguists is that language is systematic. This system is really composed of three subsystems which work together as a whole: the sound system, the grammatical system, and the lexical system. In the early stages of learning, emphasis in the classroom should be upon learning the sound system and the grammatical system through the use of a minimal number of items from the lexical system. If the student cannot react properly to the concord system of English as exemplified by such statesments as *The boy studies* and *The boys study,* adding many vocabulary items will only compound errors. Thus, unlike older teaching methods, emphasis is put first on teaching control of the sound system and the structural system within a limited vocabulary. Words in themselves are not taught first.

A knowledge of the sound system includes more than the sounds alone; it must also include intonation and stress. Many native speakers of English have had no training in listening for stress differences such as those in *gréen hoùse* vs. *grêen hóuse.* They would never make any errors in selecting the proper stress pattern in their own speech, but they may not be able to control the use of these stress patterns so that they may differentiate the two for students or give practice on them in class.

In training teachers of English as a second language I have found that this is one of the areas which needs a great deal of practice on the part of the teachers themselves before they can attain automatic control of stress.

The same thing holds true for intonation. The ability to produce rising and falling intonation patterns at will is a necessity. For when a student says It's a nice day, isn't it? and the teacher wants It's a nice day, isn't it?, the teacher has to be able to repeat the sentence with the correct intonation as a model for the student.

One caution should be made here in regard to the sound system. As usual, "a little knowledge is a dangerous thing." If the teacher has learned that a certain sound is produced in a certain way, he may not have learned the additional fact that this may be true only under certain circumstances. For example, if the teacher has learned that the */θ/* sound as in *think* is an interdental fricative, produced with the tongue between the teeth, and that the /d/ sound in *day* is an alveolar stop, produced with the tongue against the gum ridge, he may be tempted to believe that this is always true. But again a truism applies: "Circumstances alter cases." In the word *birthday,* for example, the phonetic assimilation which takes place because of the proximity of the */θ/*

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[4] Charles C. Fries, "On the Intonation of 'Yes-No' Questions in English," *In Honour of Daniel Jones,* ed. David Abercrombie *et al.* (London: Longmans, Green and Co., 1964), p. 249.

and /d/ sounds results in both sounds being produced midway between the ordinary points of articulation, that is, against the teeth. Needless time will be lost if the teacher demands that the student pronounce this word with an interdental /θ/. But the teacher who does not know the sound system in its entirety—the sounds and their distribution—may do just that.

The fact that language is systematic can be capitalized upon in progressing from one pattern to another in the language. The transformational grammarians tell us that the question is a transformation of the statement, that the negative statement is a transformation of the affirmative, and so on. Linguistically sophisticated teachers of English as a second language have been using this approach for a long time. They know that it is much more effective to base their teaching of grammar on the fact that a few essential patterns can be manipulated in various ways to produce the more complex structures. For example, *He's a student* becomes *Is he a student?* or *Who's a student?* or *What is he?* or *He studies every day* becomes *Does he study every day?* or *When does he study?* The process of building from the basic pattern toward the more complex and proceeding through the changes involved one at a time takes advantage of what the student has already learned and adds progressively to his ability to produce more.

When we discuss language as a system, we must always remember that each language has its own system and that no two systems are ever the same. As a matter of fact, the system of the native language will interfere with the process of learning a new language. The points where the two languages differ will be problem areas, and these areas will need special attention. The teacher who knows the system of the native language of the student (he does not necessarily have to speak that language) will be aware of the problems which will arise and will be better able to cope with these problems than someone who does not.

A Spanish speaker, for example, will tend to say *estudy* and *espeak* because the *sp* cluster never occurs in initial position in the Spanish sound system. Special drills will have to be devised to overcome this problem. In the early stages of language learning it is well to avoid this particular sequence if the teacher is focusing attention on some other matter at that time. For example, if the teacher is working on subject-verb agreement, it would be best to avoid phrases such as *The student speaks,* which would include the particular sound problem as well as the subject-verb agreement problem which is under attention at the particular moment. This is a matter of good pedagogy—not introducing too many problems at once—and this good pedagogy results from linguistic awareness.

Structure control also depends upon a knowledge of the fact that languages have system. A teacher who has a tightly controlled class from the point of view of structure content will accomplish much more than a teacher who has no such tight control. This can be illustrated, simply, by the use of the negative short answer. In English we can answer either *No, he isn't* or *No, he's not.* We know both forms, but a student learning the language doesn't; he must learn them. Therefore, it is best at first to limit him to one or the other. This means that the teacher must exercise a kind of negative control in the classroom presentation by not using both structures, but sticking to one or the other. Only after they are both learned should they be mixed. This again is a matter of good pedagogy which results from making use of the linguistic statements about the language.

Linguists tell us also that language is a social instrument. Social differences and language differences go hand in hand. A decision must be made as to what level of the socioeconomic scale the teacher is to use as the language standard. But a differentiation between usages which reflect social levels and those which reflect functional varieties must be made.[5] The functional level which forms the basis for most oral English teaching would definitely be conversational speech rather than the formal written type of language. And at this conversational level, the forms used by educated persons would be chosen.

The teacher's attitude toward language usage is one of the important aspects of language teaching. There is no room here for the "puristic" approach. Neither is this an "anything goes" approach. The usage which is taught must be appropriate to the social level and functional needs of the situation. This means that such forms as *Who did you call?* would probably be taught for oral production rather than *Whom did you call?*

In addition to understanding the social and functional differences which occur in speech, the teacher must know his own geographical dialect. And in knowing his own, he becomes more aware of how it differs from others. One of the greatest shocks which an English speaking teacher trainee had was to discover that his particular dialect made no distinction between /i/ and /e/ before /n/ in words such as *pin* and *pen*, and yet he was about to ask his students to repeat sets of these words in imitation of himself.

The teacher must be ever on the alert not to take a "puristic" stand on matters of geographical distribution. He must learn to choose what he thinks is best to teach, but he should never condemn other forms just because they do not happen to agree with his own choices. Fries was speaking of variant pronunciations, but I think his words of caution can be applied to all areas of language:

> . . . it must be evident that in dealing with matters of pronunciation, especially in attempting to determine what is acceptable English speech, it is well to cultivate the virtue of tolerance. There is comparatively little difficulty in settling upon some one pronunciation for any word that must be acknowledged acceptable. Justly to render a negative judgment, however, to condemn any pronunciation that one hears generally used, demands much greater caution as well as knowledge.[6]

I can remember, for example, that when I first moved to central Indiana, I heard the following types of sentences used by educated speakers in a university community:

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[5] Cf. John S. Kenyon, "Cultural Levels and Functional Varieties of English," *College English*, 10 (October 1948), 31–36.

[6] Charles C. Fries, *The Teaching of English* (Ann Arbor, Mich.: George Wahr Publishing Co., 1949), pp. 72–73.

That's because they have so many traffic signs anymore.
Anymore, the girls wear slacks to class.

This was a usage with which I was not familiar, so I listened carefully and came to the conclusion that, although I would not teach it, it was something which I would have to point out to students because textbooks everywhere are so explicit about the use of *any* in affirmative statements.

I had a similar exeprience with the expressions *Iwould like for you to do this* and *I'll have him to call you.* These again were found to be acceptable forms in the speech of educated people; therefore, they are not to be condemned. But in selecting patterns for teaching, I would choose the more widely used *I would like you to do this* or *I'll have him call you.*

Choices such as these face the teacher every day because no matter what his text or materials may include, other language matters will be brought to his attention which necessitate decisions or some statement on his part. Only the concept of language as a social instrument and not as some ideal, petrified form will make these decisions easier to make. A good rule of thumb to apply here is that the language forms chosen should never divert attention from what is being said by calling attention to how something is being said.

One of the most important assumptions for language teachers to accept is that language is noninstinctive; it must be learned. This means that language learning is a skill-building process; it requires constant practice. Classroom activities must be geared to the acquisition of this skill. Bloomfield has said, "Solving puzzles is not language learning." [7] The students should be given goals which are not too difficult for them to attain without puzzling about them, but which are challenging enough to maintain interest. In an article entitled "Applied Linguistics in the Classroom," William Moulton says, ". . . We must do in class only those things which will help form habits swiftly and efficiently." [8]

Talk about the language should be kept at a minimum. Only when this talk leads to better practice should it be condoned. Adult students, in particular, like to hear about the language. They crave "rules" for things. Generalizations about the language can be helpful to the advanced student, but they should be kept at a minimum. The majority of class time should be spent in actual oral use of the language on the part of the student.

To be effective, however, this practice must be accurate. The teacher must have a "good ear." This brings us to one further point. Teachers of oral English need the training that linguistics gives in the study of phonetics and phonemics. Many of the problems which arise in class can be handled quite simply if the teacher understands the basic essentials of sound production and the phonemic system of English. For example, a teacher whom I observed was teaching the /m/ sound in final position, and he became very discouraged when Spanish speaking students repeatedly substituted an /ŋ/ sound for the /m/ in the phrase *I'm going.* It was pointed out that it would be easier to start with a phrase such as *I'm playing* or *I'm buying* because the /m/ sound and the /p/ in *playing* or the /b/ in *buying* are produced at the same point of articulation, and the /m/ sound would be easier to produce in this sequence. Then practice could be continued with other words which do not start with a bilabial sound after the student once had the "feel" of the /m/ sound in final position. If the teacher had been linguistically trained, he would have known that this would be a problem for Spanish speakers because of the distribution of sounds in Spanish. Moreover, if he had been linguistically trained, he would have known how to devise a means of combatting this problem.

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[7] Leonard Bloomfield, *Language* (New York: Holt, Rinehart & Winston, 1933), p. 506.

[8] William G. Moulton, "Applied Linguistics in the Classroom," *PMLA,* LXXVI, 2 (May 1961), 3.

Thus, no matter whether the materials which a teacher uses are linguistically oriented or not, the linguistically oriented teacher can be much more effective because he can select content, rearrange materials, and create his own drills.

In thinking about the kinds of people that are usually asked to teach English as a second language, I find that, at the present time, very few are career teachers in this field. Teachers are drawn from two main sources: regular English teachers and foreign language teachers, both of whom have had little or no training in English as a second language. The English teacher who is accustomed to dealing with native speakers is often imbued with an eagerness to "polish" or "improve" the English of the student. He has little or no understanding of the basic problems involved in second-language teaching. His students already know English—of a sort. Their problems will be very different from the problems of a non-native speaker. The one asset he may have is that he has thought consistently about the English language.

The foreign language teacher, even though a native speaker of English, may know little or nothing about how the language operates. Moulton reminds us that "If native control of a language qualified any person to teach it, then our profession would be at a very primitive level indeed."[9] The foreign language teacher is usually called upon to teach these students, not because he knows anything about English, but because he knows the language of the student and can communicate with him. If he has been initiated into the world of linguistics, this teacher will probably become a very good teacher of English as a second language when, and if, he learns how English works. He at least knows the structure of the native language of the student.

But neither of these is the teacher who will be most efficient. The most efficient teaching will be done by a group of career people who have been well grounded in the linguistic assumptions which have been stated here and who use pedagogically sound procedures in the classroom. Moulton sums up very clearly what I have been trying to say, and although he was talking about all foreign language teaching, I think it has special pertinence here:

> . . . language teaching is doomed to remain an amateur profession just as long as it lacks a comprehensive theory on which to base its daily teaching practice. At this moment, the most likely source of such a comprehensive theory is the field of linguistics. . . . Let us combine the practice of our most skilled teachers with the language theory of the linguists and the learning theory of the psychologists and evolve our own theory of language learning. Only then can we lay claim to the professional status which ought rightly to be ours.[10]

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[9] Moulton, p. 4.

[10] Moulton, p. 6.

READING AS SKILL, STRUCTURE, AND COMMUNICATION

Charles W. Kreidler

Around the age of six, usually, the native speaker of English in our society begins to learn to read. He undertakes a learning task which, if successful, gives him a new medium of communication, the power to get information—meanings—from a printed page. This ability requires new skills, skills which are partly related to skills he already has as a speaker and hearer of the language—but only partly related. These new skills involve a new structure, for the visual marks on a page are not just random scratches any more than the sounds of language are just random noises in the air. These visual marks have a definite relationship to one another and to the elements of language which they represent.

There is a vast literature dealing with the teaching of reading to native speakers of English.[1] In contrast, the teaching of reading to students for whom English is a new language is a badly neglected area of research and discussion.[2] There is nothing surprising about this scarcity of attempts to deal comprehensively with reading in English when English is a second language. Any approach to a general treatment of the topic must take into account a great diversity of learners and learning situations. A general theory has to be appropriate to children, adolescents, and adults; to those who have no previous experience in reading any language as well as those who are used to reading from top to bottom, from right to left, or from left to right; to those who are already literate in a language which uses the Latin alphabet, those who read in another alphabetic system, and those who have learned a nonalphabetic writing system.

All these different conditions seem to require different approaches to reading instruction. And yet the goal is the same for all new learners of the language, and all new learners of the language have common types of difficulty. I think we can find a basis for experimentation and for interchange of ideas and experience by considering these questions: What are the skills required for reading? What is the structure of the English writing system? What approaches or methods have been used for teaching reading to native speakers of English? What previous abilities does the native speaking child have which the new learner of English does not have—or does not have to the same degree? My paper is an attempt to find some answers to these questions.

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[1] The most recent survey of the literature is that of Charles C. Fries, *Linguistics and Reading* (New York: Holt, Rinehart, & Winston, 1963).

[2] The teaching of reading in English as a second language is dealt with in the following: P. Gurrey, *Teaching English as a Foreign Language* (London: Longmans, Green, & Co., 1955), chapters 10–15; A. W. Frisby, *Teaching English* (London: Longmans, Green, & Co., 1957), chapters 24, 28, 30, and 33; I. Morris, *The Teaching of English as a Second Language* (London: Macmillan & Co., 1953), chapter 9.

We might say that reading requires four major skills: eye movement, visual discrimination, association, and interpretation. Along with these skills one generally learns the conventional names of the letters and the conventional order of letters in the alphabet, but these things are not important in the present discussion.

The term *eye movement* refers to the ability to move the eyes in a conventional way—for English, from left to right, back left and down a line, left to right again, and so forth. Because we write in a precise sequence, letter after letter and word after word, we are apt to think that the reader sees items in the same precise sequence. But this is a mistake. Ophthalmoscopic studies have shown that the skilled reader's eyes move in irregular sweeps, pause momentarily, and sometimes move backward. The more skilled reader differs from the less skilled one in just these particulars: the eyes move in bigger sweeps, the pauses are shorter, and there is less regression.[3]

Visual discrimination is the ability to distinguish one letter from another, one word from another, one group of words from another, and the ability to recognize repeated instances of a letter (including capital letter and small letter) as the same, repeated instances of a word or group of words as the same. To distinguish letters is obviously more difficult if the letters are similar, differing only in the arrangement of strokes (like 'p' and 'b' or 'n' and 'u') or in number of strokes (like 'm' and 'n' or 'w' and 'v'). Words are more difficult to distinguish if they are different arrangements of the same letters (like 'united' and 'untied') or if they have similar letters in identical environments (like 'come' and 'cone').

Association is the mental bond formed between visual marks—letters and written words—and the speech sounds which they represent, and the meanings which sequences of speech sounds represent.[4] Association implies the ability to recall sound and meaning immediately on sight of groups of letters.

The reader also needs the skill of *interpretation*, that is, the ability to solve the problem of unlocking meanings by adding together a number of associations. While one can reread a favorite passage any number of times, most reading, like most listening, is partly new experience—but only partly. Most reading, like most listening, is the reception of familiar items in new arrangements which are based on familiar patterns. Items and patterns are familiar; the particular arrangements of items, the particular manifestations of patterns, are new.

Suppose, for example, we encounter the sentence "The boy went on looking for the money he had lost." Our ability to understand the sentence depends on experience with the intricacies of English syntax—something much more than knowing the sound and meaning to be associated with each individual written word—and on our ability to relate the sentence to its total context. Or suppose we meet a word which we have never seen before—"filthy," for example. Our ability to sound it out depends on the associations we have already learned for the individual letters or letter groups in similar positions. If the word sound turns out to be something we already know in speech, our guess is verified by the fact that the word meaning fits into the sentence meaning. All this—and much more—is the skill of interpretation.

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[3] William S. Gray, *The Teaching of Reading and Writing* (Paris and Chicago: UNESCO, 1956), pp. 43-60.

[4] It is, of course, possible to learn to read in a foreign language without being able to speak the language or to comprehend it when heard, that is, to make a direct association between visual forms and meanings without the intermediary of speech. But this kind of reading does not concern us here.

What is the structure of the English writing system? A written or printed text is only a partial representation of speech. Vocal qualities—the speaker's tempo, loudness, gruffness, whining, for example—are not represented at all, and stress and intonation are represented only in the crudest way. Consequently, a given text can be read aloud in several slightly different ways—with different kinds of expression, we would say—all equally accurate. Yet the skilled reader finds in a page of print sufficient cues to extract meanings. If this printed page is not a faithful reproduction of what the reader might hear, it must still contain enough to remind him of whatever is embedded in his habits of hearing.

Most of the reminders, of course, are in the sound values of individual letters or groups of letters (the *grapheme-phoneme correspondences,* to use a more technical term). In a perfect alphabetic writing system each grapheme—each letter or sequence of letters—would represent the same phoneme or sequence of phonemes in every occurrence. Nobody needs to be reminded that this is not true for the English writing system. In our orthography the same phoneme may be represented by different graphemes; this is primarily a problem for the writer, trying to recall how a particular sound sequence should be spelled. On the other hand, in our writing system the same grapheme may have different sound values; this is a problem for the reader, trying to convert marks on paper into familiar sound sequences. Recent studies have emphasized the fact that a great number of words are spelled according to what may be considered regular patterns (for example, 'fat,' 'ten,' 'pig,' 'hop,' 'mud').[5] Nevertheless, an understanding of our writing system requires closer attention to the so-called irregularities of the system.

The accompanying chart illustrates the two kinds of multiple correspondence. If we look at the first kind, the instances in which the same phoneme or phoneme sequence is represented by different spellings, we see that in part the choice of letters is completely arbitrary (A-1), but in part the choice depends on position within the word or with respect to following letters (A-2). Moreover, there are three kinds of regular variation ('y' ∼ 'i'; 'e' ∼ zero; single consonant ∼ double consonant), depending on whether the meaning-unit is at the end of the word or not (A-3). Finally some apparent irregularities serve a useful purpose: different spellings for homophonous words show grammatical differences, so that the writer is guided by more than sound and the reader obtains more information than how to pronounce what he sees (A-4).

Then there is the other kind of multiple correspondence, a single graph representing more than one phoneme or phoneme sequence. In part the pronunciation of a grapheme in a particular word seems to be quite chaotic (B-1), but there is some method in the madness. The reader who knows which syllable

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[5] This is the position, for example, of Fries, *op. cit.*, and of Robert A. Hall, Jr., *Sound and Spelling in English* (Philadelphia: Chilton Books, 1961), both of whom tabulate the most regular graphemes. A more thorough analysis of the English writing system is provided by W. Nelson Francis, *The Structure of American English* (New York: Ronald Press, 1958), chapter 8, to which I am indebted for much of what follows.

CHART

A. Same Sounds Represented Differently (a problem for the writer)

1.	get guess	bed head	valid valley
2.	tell let	tack kitten cat	toy coin
3.	baby babies	carry carried	happy happiness
	make making	blue bluish	smoke smoky
	big bigger	hop hopped	cut cutting
4.	boys boy's	tax tacks	find fined

B. Different Sounds Represented Alike (a problem for the reader)

1.	bead head	get gem	thin then
2.	imply simply	allow swallow	
3.	social society	Canada Canadian	invite invitation
	I cán. I can dó it.	They háve. They could have dóne it.	
4.	the use to use	a house to house	
	a contrast to contrast	an insult to insult	
	an estimate to estimate	separate to separate	

carries the word stress is better able to figure out the pronunciation (B-2). Often the pronunciation of a meaning-unit (or *morpheme*) depends on the other meaning-units with which it occurs or the position it has with relation to the sentence stress (B-3). One spelling is sufficient for representing the meaning-unit, even though the pronunciation varies, because the environment of the spelling tells the reader how the graph is to be pronounced—*if* the reader has sufficient experience in hearing and speaking English.[6] Similarly, a pair of related words, differing slightly in pronunciation, may be represented by the same graph (B-4). Again, environment tells the skilled reader what the pronunciation is.

Many different approaches have been advocated and used in the teaching of reading—alphabetic, phonic, word, sentence, narrative, eclectic. These approaches differ in the basic unit taken as the starting point—the letter, the word, the sentence or some larger unit—and in the degree to which the procedure requires piecemeal learning or learning by analogy. Since we can not examine all these approaches here, it will be convenient to look at two diametrically opposite approaches, the "word method" and the "phonics methods."

A word method ("See and say") is a piecemeal attack on association of single word-shapes with the appropriate sounds and meanings. A few words are introduced at a time, each quite different in form and value. A small repertory of words is repeated in as many different arrangements as possible. New words are introduced at a slow but steady rate and are constantly repeated. An example:

> Look. Look, Jane, look. Look at Spot.
> Look at Spot run. Spot can run.
> Run, Spot, run. Run, run, run.

A phonics method, on the other hand, focuses on the single letter value as the basic unit. The attack may be piecemeal, dealing with a single graphic unit in various positions, for example the 'm' in *man, music, come.* Or the attack may be systematic, analogic, as in the methods proposed by Bloomfield[7] and Fries.[8] (Because the term "phonics" has been most often used with reference to a piecemeal attack on phoneme-grapheme correspondences, both Bloomfield and Fries have endeavored to dissociate their more systematic procedures from that name. I see no reason, however, why the word "phonics" can not be used to include both the piecemeal and the analogic procedures.) In the Bloomfield-Fries approaches the child is presented with constantly changing letters in fixed frames: *bat, cat, fat; can, fan, man; let, met, set,* etc. Sometimes frames are contrasted: *hat, hate, mat, mate, mad, made,* etc. After this introduction to phoneme-grapheme correspondences the repertory of words is put together in sentences, though the resources for making sentences are necessarily meagre in the early stages. An example:

> Dan had a tan hat. Nan had a fat cat.
> Dad can fan Pat. Can Pat fan Dad?

Whether or not these approaches are satisfactory for the native speaking child, they can not be satisfactory for the new learner of English. Word methods and phonic approaches build on language skills which the native speaker already has, but which the new learner of the language can not be expected to have.

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[6] This sort of *morphophonemic representation* is of two kinds, as the chart indicates. First, in the more learned (Latin-Greek) part of our vocabulary there are numerous bound forms (*socio-, econom-,* etc.) which vary in pronunciation according to what affix they occur with (*soci-al, soci-ety, econom-y, econom-ic*). Second, there are some fifty common "function words" (*can, have, for, him,* etc.) which vary in pronunciation according to their position in a sentence, chiefly a matter of whether they are spoken with heavy stress or weak stress.

[7] Leonard Bloomfield and Clarence L. Barnhart, *Let's Read: A Linguistic Approach* (Detroit: Wayne State University Press, 1961).

[8] Fries, *op. cit.*

The six-year-old child knows an enormous amount of his native language—though he doesn't know that he knows it. He is familiar with the subtleties of intonation melodies and the subtleties of word arrangement. He knows, for example, the difference between *Your mother isn't at home* and *Isn't your mother at home?* He can discriminate the phonemes of his language; he would see no reason why anybody should be confused about the difference between *sheep* and *ship, coat* and *caught, sun* and *sung.* His vocabulary still needs to grow a lot, but it is already large and for each item in it he knows a wide range of meanings, that is, a wide range of possible combinations with other words. The word *take,* for example, is already familiar in such varied uses as *Take your time, Take your elbows off the table, It's time to take your bath, It's time to take your nap, You have to take your cough medicine, We're going to take the bus.* Moreover, he knows the relationship between constructions in the language—the relationship, for example, between *I'm taking it* and *I took it, I didn't take it, I haven't taken it.*

In learning to read, this native speaking child has to acquire eye movement, visual discrimination, and association of visual symbol with sound and meaning. But his skill of interpreting the total sentence sound and total sentence meaning depends largely on his previous experience with the language. Whether he learns the visual shape *take* as a single item or as part of a series *take make, cake, lake,* he already knows much—unconsciously, to be sure—of the position of this item in various sentences, its power and its contrast.

For the student of English as a second language, reading instruction must be part of the total learning of the language, a systematic reinforcement and extension of the student's still small experience with oral language. Reading materials can not contain haphazard combinations of words, no matter how the words are chosen. The approaches to the teaching of reading which we have discussed above are too likely to introduce haphazard combinations. The sentences *Look at Spot* and *Look at Spot run,* which are juxtaposed in the illustrative sample above, seem to be quite similar, but they are really quite different as sentence types. Or compare these two sentences, taken from a single page of Bloomfield's text: *Hap had a nap* and *Dad had a map*;[9] to the native speaker of English, *had* is the same word in both sentences, but we can not assume that they are the "same" for the foreign student. Reading materials for the new learner need far more attention given to the relationship of word and word, word and sentence, sentence and sentence. I think this might best be accomplished through three kinds of reading practice: sentence reading, word reading, and narrative reading, introduced in that order.

By "sentence reading practice" I mean something like the pattern practice which we use for development of oral skills. The first focus of attention is not a single letter value, nor is it a few words learned as separate items. Rather the focus is the single sentence frame, with words changed in one spot. A typical early sentence frame might be "This is a ________" read with a small number of nouns filling the blank: *This is a house, This is a car, This is a man, This is a*

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[9] Bloomfield and Barnhart, *op. cit.,* p. 63.

woman. Or, with verbs as fillers, the frame might be "I can ________": *I can walk, I can run, I can swim.* When one frame has been practiced in this way, slightly different frames are introduced for practice with the same fillers: *This is not a house, This is not a car,* etc.; *Is this a house? Is this a man?* etc.; *We can run, We can swim,* etc.; *Can you walk? Can you swim?* etc. As new sentence frames and new word fillers are introduced, the frames become longer, combining two or more shorter frames: *The man can swim, The man can read, The woman can read,* etc., and then in contrast, *The man is swimming, The man is reading, The woman is reading,* etc. The number of word fillers and the amount of time spent on a single sentence frame depend, of course, on the oral proficiency and general sophistication of the class, but in any case no sentence is read which has not been practiced orally before. No attempt is made at this stage to teach letter values. Words which fill the blank are learned as whole units, by piecemeal association. But something else very important is learned—where these words go, what part they have in a total sentence meaning. And the reader begins to develop the skill of seeing whole word groups at once and the skill of reading aloud with the proper intonation and stress patterns.[10]

When students have learned a number of frames and fillers by this method, they are ready to begin word reading practice. Fillers are separated from the frames in which they occur and are grouped in sets which illustrate one spelling principle at a time. These word sets include not only such regular correspondences as *fat, cat, hat;* they also include such irregularities as *get* and *gem, get* and *guess;* they include such variations as *baby, babies, lady, ladies, city, cities,* and *swim, swimming, run, running, sit, sitting,* and, at a later stage, such variations as *an insult, to insult, a contrast, to contrast* and *invite, invitation, combine, combination.* In short, word reading brings every possible contrast encountered in sentence reading to the student's attention, so that he can grasp every analogic principle in the writing system, and also the limitations of this principle.

Sentence reading practice aims to develop the learner's eye-sweep and his ability to associate visual forms with sound-meaning combinations. The purpose of word reading practice is to help the learner to discriminate more closely and to grasp the structural principles of the writing system. But the development of skills and the grasp of structure are not all of reading. Our third kind of practice, narrative reading, gives the learner experience with reading as communication, getting meanings from a longer continuous discourse. In narrative reading the sentence frames previously practiced in an orderly fashion come in the haphazard way which is typical of language used in context. The narrative contains the vocabulary already learned, but a few new items and combinations can add interest without creating great difficulty. As the student progresses, isolated sentence reading becomes less important, and narrative reading practice has a larger part in reading instruction. Skill and structural knowledge are put to use for their intended purpose, which is the purpose of any language learning activity, the exchange of meanings—communication.

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[10] A sentence pattern approach in reading instruction for native speaking children is advocated by Carl A. Lefevre, *Linguistics and the Teaching of Reading* (New York: McGraw-Hill Book Company, 1964). Lefevre seems, however, to advocate a much more generalized concept of sentence pattern than what is proposed here.

THE TEACHING OF OTHER SUBJECTS IN A FOREIGN LANGUAGE

Peter Strevens

Let us begin with an example. Nigeria is a country which uses English as the medium of instruction from an early stage in primary school right through the secondary school, as well as in colleges and universities. Being the medium of instruction, English is the language in which most, if not all, school subjects are taught throughout the country. There is a long tradition of school education and also of service as teachers or school inspectors on the part of native speakers of English. And yet it has been suggested that, if the "subject" called English were to be abolished at once from the timetables of all schools in Nigeria, there would be no perceptible effect upon the standard of English attained by Nigerians by the time they leave school![1]

My own inclination is to accept that this judgment is probably correct, though there is little chance that we shall have the opportunity of verifying or refuting it. All the same, the case may serve as introduction to the whole subject, for two reasons: in the first place, it illustrates some of the ways in which the teaching of other subjects in English can be important, in one of the main types of situation where it occurs; and in the second place it illustrates the status of most of the remarks in this paper, which are not the result of carefully validated research either in linguistics or in educational theory. Rather they are hunches and observations based on the experience of myself and others. Any individual proposition in this paper may well be capable of refutation from experience elsewhere; but my general conviction is, after working in Africa, France, and Britain and after picking the brains of many specialists, that this matter can be outlined in the following way, at least as far as British-based experience is concerned.

Other subjects are taught in English (and, although I shall concentrate on examples from English, it is worth bearing in mind that English as a foreign language is after all only a special case of the general category of foreign languages) in four main types of situation: first, in many Commonwealth countries where English is the medium of instruction as well as having a privileged official status in the life of the country (analogous conditions apply for French in most of the former French territories); second, in Britain, in teaching the children of immigrants, a task which has suddenly exploded into dramatic proportions; third, in the teaching of foreign languages in primary schools in Britain, which seems likely to become universal within a very few years, the identical problem arises, though for French rather than English; fourth, in Britain, in a small but growing proportion of tuition given to students and other adults learning foreign languages as an adjunct to other studies in certain colleges and universities, including my own. Each of these main categories merits a brief discussion, after which we can attempt to discern some degree of general patterning in the ways in which the teaching is being carried out.

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[1] See "Factors in the Reform of Language Teaching in Africa," in P. Strevens, *Collected Papers* (Oxford: Oxford University Press, forthcoming).

The Commonwealth Countries

When the medium of instruction is a language other than the mother tongue of the pupils, obviously other subjects are being taught in the foreign language. But the point of the observation about English in Nigeria, with which this paper began, is that we may have been wrong in the past when we attributed the major importance, within this kind of educational system, to the specialist teacher of English and to his professional training and to the courses he uses. It may well be that the average standard of attainment of the pupils in English (and, by implication, in *all* subjects) is determined rather by the average standard of performance in English of all teachers of all other subjects. It is certainly true that for the great majority of the pupil's time he is being taught by teachers other than English specialists, and we should pay greater heed in future to the performance in English of the teachers of mathematics, biology, and geography, who will be teaching in English.

The teaching of other subjects in English is generally a *school* problem, rather than a problem in adult education, and indeed it occurs more frequently with younger children than with older ones. As competence in the foreign language increases, so the language becomes easier to use as a tool for learning in general; in a sense the problem eventually almost solves itself. It is at the beginning of the process, with the younger children whose teachers tend to be the least sophisticated and the least well prepared in both language and teaching techniques, that the difficulties are greatest. The fact that the problem seems to solve itself (i.e., that advanced pupils eventually use English quite easily in learning other subjects) may reflect the greater average competence of teachers in the higher classes at least as much as the pupils' own increased ability in English.

In many Commonwealth countries this matter of teaching other subjects through English is a facet of the total educational process. If a country has many languages, none of them usable outside its borders, perhaps some of them not yet committed to writing, the education of its young citizens is more complex and difficult than in countries like Denmark or Italy, where there is a single national language and one already adapted to education for modern technological civilization. If the local or national languages of a country have not yet been used to teach mathematics, biology, physics, etc., then English usually becomes the medium for all instruction.[2] There is (or should be) one important exception to this general statement: when children are taught about their own culture, traditions, and institutions, it seems right that they should learn in their own language. It is cultural and educational imperialism either to suppress such studies altogether or to force them to be carried out through the medium of English. To take an example from Ghana, it may as yet be difficult to describe in Konkomba the second law of thermodynamics, but it is equally difficult to describe in English the religious beliefs of the Konkomba people.

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[2] There is no question about whether any given language *could* be adapted for such purposes. All languages are equally susceptible of being made suitable for any activities that its speakers habitually engage in. The notion that some languages are inherently inferior to others is one which has no linguistic or anthropological justification.

The effect of teaching other subjects through English should be to integrate the instruction in English with the instruction in those subjects. The younger the pupils, the more important this integration is. Ideally, in those cases where English is the medium from the beginning of primary education, the child's general education and his "subject education" should be developed in synchrony with his learning of English. Unfortunately this entails the most delicate and complex planning of syllabus, course book, and supplementary materials, and it has hardly ever been attempted, let alone achieved. Speaking of British materials only, the sole exception is the Peak Course, originally conceived for teaching Indian children in Nairobi, Kenya, but now expanded to meet the needs of African children in the same area.[3]

Before leaving this category, a word should be said about the project for teaching in Africa the new primary school mathematics devised by the Africa Work Study project of Educational Services, Inc.[4] The team producing the mathematics material realized from the outset that this would be a language problem at least as much as a problem in teaching mathematics or in retraining primary school teachers. They were careful to bring linguists into their preparatory work and into the field trials of the teaching courses. Among the many interesting aspects of this work (which is still in progress) is the fact that allowance had to be made in various areas of Africa for differences of number concept or of notions of identity and contrast, which often proved to be at the basis of "blocks" or difficulties in handling mathematics. This work is making a most important contribution to the development of techniques for teaching other subjects in English.

Teaching Immigrant Children in Britain

Britain has not, until recently, experienced an immigrant language problem, least of all in its schools. It is only in the past ten years or so, and especially in the past five years, that citizens of Commonwealth countries (who have after all a certain right to reside in the mother country of the Commonwealth) have begun to arrive in very large numbers. At the outset, the incomers were from places like Cyprus or Malta, where the standard of English attained by the average citizen is fairly respectable, or from the West Indies, where the mother tongue is a variety of English, however unfamiliar in accent. With these immigrants the language problem was relatively simple.

But the more recent waves of immigrants have been from India, Pakistan, and parts of Africa, and their arrival has added a new complexity to the educational programme of the country. To begin with, they often came in the first place as individual men, leaving their families behind. Then, after two or three years they had saved enough to send for their families. Hence we have a second wave of immigrants comprising very largely the wives (who tend to stay rigidly at home and barely come into the language teaching picture, even though their English is nil) and the young children. Once the wives reach Britain, further children are born, thus engendering a third wave of members of immigrant families.

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[3] The Peak Course (London and Nairobi: Oxford University Press, 1961).

[4] See paper by Shirley Hill, p. 60 in this volume.

The point to notice is the surprisingly long time lag, perhaps seven to ten years, between the first arrival of an individual immigrant in Britain and the time when the last child of his family without knowledge of English reaches a British school. What is more, these children arrive in the classes of primary school teachers who never anticipated having an English language teaching problem and whose professional training did not even mention the subject.

There are no suitable materials to help the teacher or the pupil; there is very little understanding in the schools of the nature of the problem. The view most widely held is that English will somehow "rub off" on these children through contact with other children. Not only is this point of dubious practical value at the best of times, but since schools with immigrant children generally have them in quite large numbers (some schools, indeed, already have 50 percent of immigrant children) these children make friends chiefly among their own group and so do not expose themselves to the "rubbing off" process.

One possible solution—and there are of course several other possibilities—is to designate some schools in the area as the ones which between them will receive the whole of the primary school intake of immigrant children having a language problem; to concentrate into these schools the most experienced teachers; to give intensive special teaching in English *and* in the basic school work (one can hardly talk of "subjects" at the level of seven and eight years); and then to redistribute the children back among the whole range of schools in the area as soon as they can deal adequately with school life in English. A good deal of success along these lines has been achieved by such pioneering head teachers as Trevor Burgin of Spring Grove School, Huddersfield.

No matter how the job is done, it calls for special training for the teachers, special teaching materials, special administrative arrangements. The Schools Council of England and Wales is discussing a scheme for the intensive development of courses and materials, probably beginning in those regions which have the greatest problem but maintaining a central coordination.

All this may seem at first sight a long way from our topic, but in fact this turns out to be the very acme of "teaching other subjects through English," since the only way into their entire education, for these children, is through and in English.

Primary School Foreign Language Teaching

In 1961, the teaching of foreign languages in primary schools in Britain was confined to a handful of children in only one or two schools. But in one case the teaching was part of a deliberate scheme of field trials on the part of a leading educational administrator, George Taylor, Chief Education Officer of the City of Leeds. His first trial was carried out in optimum conditions: he employed a trained, graduate, native speaker of French (Mme. Marcelle Kellermann), selected a first class school in a fairly prosperous residential area, chose a group of a dozen or so pupils who had already shown a high level of intelligence by passing the selection test for admission to grammar school, raised the money for sufficient equipment and realia, and gave the class to Mme. Kellermann full time. For eight or nine weeks these children, all aged eleven, were taught French and were taught everything else in French. The results were a great success, and they received widespread publicity just at a time when public opinion was already becoming more cosmopolitan. A wave of parental enthusiasm for primary school language teaching began to form.

Subsequent trials run by Mr. Taylor in Leeds deliberately sought the least favourable conditions, in order to provide a measure of comparison. Nongraduate, non-native (i.e., non-French) teachers were used in little-favoured schools, teaching unselected children for only a couple of hours each week. Yet in spite of differences in the quality of the results, it was clear that enough success was being achieved for the hypothesis to be formed that foreign languages could be usefully taught in primary schools in Britain.

At this point the Ministry of Education moved in and set up a large-scale experimental project, using several hundred schools in a number of selected areas and giving intensive training to the teachers. There remained the vital question of teaching materials. Very little existed that the average British primary school teacher could hope to use. To fill the gap the Nuffield Foundation set up its Foreign Language Teaching Materials Project, which is producing a full range of recordings, visual aids, teaching manuals, and so on for teaching French to the age range eight through thirteen. They achieve this end by bringing into the French instruction not only the results of modern thought in applied linguistics, language teaching methodology, and primary school method, but also a good deal of the content of the rest of their schooling, which of course takes place in English.[5]

Teaching Foreign Languages to Adults in Britain

The recent changes in public attitudes about languages have included a certain reaction against the limitations of the conventional role of foreign languages in higher education. This role has traditionally been more or less restricted to university degree courses in literature and philology. The reaction now apparent is directed not against the existence of such courses, which have an obvious academic merit of their own, but rather against the fact that nothing else has been available. A young man or woman who wishes to enter industry or commerce or one of the professions and to exercise there the discipline of his choice could not hope also to receive sufficient relevant training in a foreign language to enable him to communicate with his opposite numbers abroad. We have in fact reached a major crisis in our national foreign language potential.

The first way in which reaction was expressed was in the creation of large numbers of foreign language courses for adults at evening institutes and colleges of further education. This particular solution to the problem meant in effect that one kind of training (the vocational or professional) was being followed by a second and separate one (the foreign language). But recently a more radical and, I believe, more satisfactory solution has emerged in which the teaching of the foreign language is increasingly merged and integrated into the teaching of other subjects.

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[5] This work is under the direction of Mr. A. Spicer, whose team is also engaged on preparing yet further materials for teaching Spanish, Russian, and German. The Nuffield Foreign Language Teaching Materials Project is at present located at 5 Lyddon Terrace, Leeds 2. It is in my opinion the most important project of its kind in Europe.

It is always difficult to graft new notions into existing universities. So we should not be surprised to learn that it is in some of the newly created universities and in the colleges of advanced technology that these new concepts of language teaching have found most favour. In an important series of broadcast lectures the Vice-Chancellor of the new University of Essex outlined his plans for making foreign languages an integral part of degree courses in literature, government, and other disciplines.[6] He also made the proposal to replace the normal university provision of a department of French, of German, of Spanish, of Russian, etc., each of which teaches a degree in literature and philology, by a Language Centre, into which would be concentrated all the university's activities in the study and teaching of foreign languages.

These proposals are now in action. Almost for the first time in British universities, foreign languages are now being taught so that other subjects may be studied and practised in those languages. "French for sociologists" begins to mean something when it is aimed at giving a student of sociology the ability to carry out a research project, however modest, in France or using French data.

The sequence of operations that becomes necessary if one is to teach languages for use is this: first, there is a period of basic teaching of the foreign language, concentrating above all on speech;[7] next, as the student consolidates his ability, an increasing proportion of his practice material, spoken and written, is drawn from the other disciplines of his course; finally he can study the discipline itself through texts and sources in the foreign language and can communicate with his counterparts abroad.

At this level of education the greatest shortage is of properly prepared practice material within disciplines such as government, sociology, and economics, material spoken or written in the foreign language that is being studied. One of our first developments at Essex will be the collection of a major corpus of recordings and texts of this nature, so that they can be integrated with the language tuition.

A Tentative Search for General Principles

Let us seek to bring together from the experiences of these different types of foreign language teaching some general statements about teaching other subjects in a foreign language.

First, in what circumstances is it legitimate to teach other subjects in English? Certainly this is acceptable in those situations where it is built into the educational system (as in the Commonwealth countries or for immigrant children in Britain). But it is a different matter to prescribe this as the best course of action for all circumstances. Indeed, I would doubt whether the most common cases of English language teaching really justify the teaching of other subjects in English, at least in any full sense of the word "teaching." It is one thing to capitalize in the English class upon the newly acquired content of classes in other subjects, in order to maintain interest and provide varied practice material; it is quite another to set out to seriously teach another subject in a foreign language, unless this is already an inescapable task. In the remarks that follow I shall assume that this proviso is taken for granted.

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[6] The Reith Lectures for 1963, entitled *Building a New University*, delivered by Dr. A. E. Sloman, and published by the British Broadcasting Corporation, 1964.

[7] It is worth noting that many of the new universities, unlike most of the longer established ones, now accept into language courses students with no previous knowledge of the language they wish to learn.

Except in the special case of primary school education in a foreign language, a certain minimum practical ability is essential before any other subject can be taught in that language. A methodological consequence of this fact is that in the early stages of bringing "subject" content into the English programme it is necessary to restrict this content to what has already been taught in the mother tongue. But once the standard of attainment is fairly high, it becomes pedagogically possible (though not necessarily administratively desirable) to teach new content in these subjects in the foreign language.[8]

Next, it is clear that teaching other subjects through English requires special teaching materials to be devised. Courses in geography or mathematics originally prepared for school use in Britain or America are emphatically not suitable for use as an adjunct to English teaching in Latin America, or India, or Africa. Just as specialisation to meet the precise needs of the learner is nowadays accepted as desirable for his main English course, so equally specialisation is needed in ancillary materials such as those we are discussing.

The most important characteristic of this specialisation will be *integration* of content and level between the English course and the courses in other subjects. It is the progression of the English course which must determine the linguistic progression of the materials in the other subjects. This means a good deal of care and professional skill, but it is not very far removed from what is already done in the best of the graded supplementary readers. But I suspect that a great many pupils would much prefer to have their English practice in the field of geography or science rather than go on being subjected to bowdlerised versions of the more faded flowers of British literary mythology. Simplified versions of the stories of King Arthur and the Knights of the Round Table may make interesting reading to children in Brittany, but in Paraguay or Pakistan a simple explanation of a jet engine, or the effects of construction of a very large dam, or a brief description of space navigation are more likely to keep the customers interested. But to include such topics within the bounds of "integration with other subjects" presupposes that such matters are in fact introduced in the classes of such subjects, a supposition which, alas, may not be valid.

A further general proposition is that teachers need to be given special instruction, as well as special teaching courses, before they can be expected to teach other subjects in English with any degree of competence. Teachers tend to be effective and interesting only when they are teaching those precise courses that they were introduced to during their professional training; if they are asked to depart from the well-worn track, they must be shown in detail the topography of the new paths. We should also recall that the performance in English of those who teach other subjects is at least as important as the performance of the English specialist.

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[8] Sometimes this is diplomatically essential, too. Teachers of history, or geography, or biology, who normally teach the whole of their subject in the mother tongue, may take a good deal of persuading to permit their initial instruction to be followed up and retaught in the English class. The idea of teaching *new* content through English may take a long campaign before it is accepted.

Where, in all this, is the place of linguistics? Certainly not in the classroom. Rather it belongs *behind* the teacher, in helping to plan the integration of English with other subjects, in determining the linguistic content of courses and textbooks, and above all in professional training for the teacher.

The teaching of a foreign language is part of the total education of the individual and is therefore always important. But its importance becomes even greater when it is employed as the carrier for learning other subjects.

TEACHER TRAINING FOR TESOL IN DEGREE AND CERTIFICATE PROGRAMS

J. Donald Bowen

The title of my paper suggests several possible treatments of the subject of teacher training programs in the United States. One treatment might be a survey of where such programs are offered. Since the Center for Applied Linguistics (CAL) is collecting data to bring an earlier survey up to date, it would be needless for me to try to duplicate this effort. Suffice it to say that with the field of TESOL growing as fast as it is, surveys of training programs must be made at fairly frequent intervals if we are to be accurately informed of the extent of this kind of activity.

Another possible treatment is a discussion of the content of existing ESL teacher training programs. This subject is also treated in the CAL survey—at least in outline form. It would be instructive to know the details of training programs, especially of the newly established ones, in order to know how programs at the present time resemble each other and how they differ. With this information it might be easier to formulate the treatment I really want to present: not what programs *are*, but what they *should be*.

Perhaps a more appropriate and less presumptuous title for this paper would be "Some Considerations That Play a Part in the Design of a Teacher Education Program for English as a Second Language." I say "teacher education" rather than "teacher training" because I am referring to those programs that extend through at least one academic year, that go beyond an orientation to the available materials for a particular teaching situation and beyond an introduction to the standard presentation techniques appropriate for those materials.

Teacher training of course has a place in our programs. Many colleges and universities are engaged in training Peace Corps Volunteers to go out and teach their mother tongue, summer institutes are training (or possibly in some cases retraining) teachers of English and of other languages, short-term seminars and workshops are training others for service in language classrooms in this country and abroad. These are important programs, and their success will do much to ensure the rapid spread of better language teaching methods to a large number of classrooms.

I wish, however, to describe a program which has the more ambitious goal of preparing experts in English teaching. The difference between training and education in this context is not just a matter of the amount of instruction offered—a two-week seminar or a two-month institute compared to a year of graduate work; it involves the nature of the instruction. It is superficial, but perhaps suggestive, to characterize the difference as follows: in a training program the major emphasis is placed on answering questions that teachers ask; in an educational program the major emphasis is placed on what questions should be asked—the answers are almost incidental. Said in another way, training concentrates on specific solutions to problems, education on available alternatives.

The important difference in these two approaches is the amount of theory presented—theory of language (the "matter" of instruction) and theory of teaching (the "method" of instruction). In a course of limited duration there is not sufficient time to dwell on theory. A more pressing need, the *how* of classroom presentation, must be met, and a limited time devoted to this area will almost always provide a greater immediate yield than a brief excursion into the more recondite terrain of general theory.

Exciting and promising new theoretical formulations on the general nature of language have been offered to the teaching profession in recent years, and new or refined statements and explanations will no doubt continue to appear. We can be grateful for such advances in general theory, even though we may not immediately understand all of the implications they carry for our language classrooms. It is the nature of progress that applications lag behind theory, but substantial improvements in the ways of doing familiar things almost always evolve when new insights are provided by fresh theoretical advances.

Most observers would agree that, other things in each case being equal, a person who enjoys teaching, who likes his students, who knows his subject, who knows how to present his subject, will be a more effective teacher than a person who lacks these characteristics in some degree. Teaching a language, like teaching any skill, involves one additional requirement placed on the teacher: the ability to use the skill himself. Language teaching is very much more efficiently performed by a person who has mastered the skill he teaches.

At one time it was perhaps thought sufficient for a teacher to know his subject. Given this knowledge, it was assumed, he could transmit it to his students. But those interested in formal education have observed that two teachers may know a subject equally well, but one will be much more successful in the classroom than the other. Some teachers are more effective than others, and educators have been trying for years to analyze and define precisely just what constitutes superior teaching. The assumption is that such an analysis would allow us to present one by one the elements that constitute effective classroom performance and that by presenting the resulting set of steps we could prepare new teachers quickly and efficiently.

Perhaps knowledge of the subject and knowledge of how to teach have each at one time or another been overemphasized. Both are important and must be considered in the design of a teacher training program. The answer to how to teach people to teach, however, is not a simple matter of finding a correct proportion of subject knowledge to methods. A classroom approach that works very well for one teacher may utterly fail when copied by another. The best classroom approach cannot be decided by a single formula but has to be adapted to the personality of each teacher, a fact which makes the professional preparation of teachers a very complicated task.

It is this complexity that dictates a broad and comprehensive approach to teacher education. Students in this discipline must know their subjects and must know a great deal about how other teachers have succeeded and then be guided to discover what combination of classroom techniques, procedures, methods, and approaches works best for them. This suggests that practice teaching or intern service is a very important part of a teacher education program. It further suggests that a teacher's education will continue, sometimes for many years, after he finishes his own formal education and begins teaching.

But what kind of program of professional preparation can most effectively prepare him for the classroom? And what are the special requirements of teaching languages that should be anticipated? What kind of basic training design will be most helpful in providing teachers with a common background of experience from which they can develop their own individual and unique approach to teaching?

I would organize a teacher education program in two general fields: linguistics and education, with the latter including supervised practice teaching. The linguistics component should be developed in three areas: theoretical linguistics, applied linguistics, and practical linguistics.

In the area of theoretical linguistics a student should endeavor to understand human language behavior as fully as the current development of the science permits. He should know what a model of a language system is, how it works, and what it explains. He should understand the essentially creative nature of the great majority of individual speech acts as well as speech as an expression of human behavior. He should appreciate both the total complexity of a language system and the underlying simplicity that must be assumed to exist, since it is mastered by speakers with every degree of aptitude. A future language teacher should also understand how a linguist goes about the business of analyzing a language: the concepts, tools, instruments, procedures, and methods that he employs.

I don't mean that the teacher trainee should try to become a research linguist, but he should understand the field thoroughly enough to be willing to lend his professional support in areas where he can cooperate and to welcome the continuing research that will perhaps have an important pertinence to his work as a teacher.

In the area of applied linguistics a student should first of all know the structure and system of his own language. He should also thoroughly know the structure of the language he teaches (if this is other than his own native tongue) and the structure of his students' language or languages. He should be able to profit from the insights of contrastive analysis, so that he can focus knowledgeably on specific predictions and decisions: For example, on which part of a language course should emphasis be placed and how can a variety of learning activities be sequenced?

The area of practical linguistics must be defined in terms of the language the teacher speaks natively. If he teaches a language other than his own, then he must make every effort to master that language as well as he possibly can. The responsibility to produce a reliable model of the language and to enforce acceptable standards on the part of the students places an imperative responsibility on the teacher. A person teaching his own language *has* these skills, but he should study the language of his students and endeavor to do as well at it as he would like his students to do with *his* language. There are at least three reasons why a person teaching his own language should study another: (1) he can communicate with his students and can win their confidence more easily, (2) he can observe the application of effective teaching and learning techniques in a meaningful situation over a period of time as his skill in the language develops, and (3) he will have the experience of this kind of learning, which will make him more sympathetic and understanding when he sees his own students struggling with their problems.

The knowledge of theoretical linguistics is helpful primarily in shaping the attitudes and concepts of the teacher and in providing background of understanding that will encourage the most intelligent application of all the resources of teaching in a particular situation. The knowledge and skills of applied and practical linguistics will be carried directly into the classroom and will be put to work regularly. All of these aspects of linguistics are useful and important, and they should be adequately reflected in a program of teacher education.

The second general field to be included in a program of teacher preparation is professional education, in which the problems of pedagogical theory are considered and solutions are actually tried out. This component consists of three important areas: philosophy, methodology, and practice teaching.

The philosophy of education as it pertains to language teaching must be developed broadly. It must seek answers to the obvious questions about why we teach languages, which we will teach, and whom we will teach them to. It must also look to such practical problems as what varieties and levels of language usage should be introduced in the classroom, how the problems of proper motivation and incentives should be met, and how language study can be properly integrated in the total curriculum.

Answers to this last problem lead to another important concern of educational philosophy: the part that languages, first and second, play in society. This concern includes the varying problems of different learners: students, adults, immigrants, foreign visitors. The roles different languages play in a culture are complex, and never is this more true than in the case of English taught as a second language. Is English needed for school, career, travel, professional contacts? Is the student switching his cultural identification (as in the case of many immigrants), or is he merely seeking to expand his cultural horizons? Will there be socially motivated resistance to standard English in favor of local varieties? If so, should standard English be taught? All of these questions and many more are considered in a course on the philosophy of education. These are difficult questions to answer, and oftentimes no generalizations can be made, since factors to be considered interact in complex ways.

Another area of professional education of particular concern in language teaching is methodology. The problem here is to learn the most appropriate match for specific learning problems and teaching techniques. This area also includes an understanding of the psychology of learning, of possible ways for developing motivation, of the best means of relating classroom and real life experiences. How does a teacher supply flesh to the bones of the lesson plan? How does he distribute the time available over the activities and practice for the skills he wishes to produce? How does he examine students for achievement?

The philosophy of education defines the terminal behavior we hope to produce. Pedagogical methodology outlines the small steps to be taken to move towards the goals that have been defined. Both are important to achievement.

A third area of professional education in the design of a program of teacher preparation is supervised practice. Supervised teaching is on-the-job training, where the apprenticeship is completed, where the theories of the general courses can be tried out in real situations.

Practice teaching is especially important for two reasons: (1) it is a very meaningful activity where a master teacher can pass on suggestions and ideas on the "art" of teaching—as opposed to the theory—and (2) with proper guidance a teacher in training can save a great deal of time in developing classroom skills. There is no need to make all of the mistakes of the past before beginning to reach for maximum efficiency. Other things being equal, the well-supervised intern teacher will start his actual teaching career from a position along the road to efficiency, not at the beginning. It is in intern service that the accommodation of abstract ideals to the personality of a particular teacher must be made. The art of teaching will probably never be programed in small steps, and room must be left for the teacher to be a human individual as well as a pedagogical guide.

Although a certain amount of teaching skill and with it a lot of confidence comes through self-discovery, the key person in practice teaching is the supervisor. This should be a successful teacher with wide experience, a flexible and imaginative person with the perspective to see more than one side of every situation, a person who can help teachers with different talents develop in unique patterns, capitalizing on strengths and minimizing weaknesses.

Supervised teaching is the most difficult phase of a teacher education program to supply in many TESL programs. One reason is the difficulty of finding an adequate number of classes for the interns to work in. There are three kinds of classes available in the United States. The first is made up of children who came from homes where English is not the first language, such as the Mexican-American children found in the border states; American Indian children, mostly located in the western states; and concentrations of immigrant or refugee families, such as the Cuban colony in southern Florida. The second kind of TESL classes available is designed to help foreign students studying in the United States, usually in our colleges and universities. The third kind of classes includes the adult schools that attract immigrants, usually those studying in a combined citizenship and English program. These are usually found in larger cities.

The different kinds of classes listed above have very different purposes and problems. The child from a non-English speaking home needs to learn to communicate so he will not end up underprivileged as he seeks his role in the only society he knows. He may be poorly motivated, not encouraged in his home, and forced to study in a system that has developed its traditions more through neglect than through thoughtful educational planning. Such schools often fail to develop the students' full potential. Very fortunately this situation has begun to change, and there are now many more bright spots on the map.

The foreign student needs enough English to pursue his studies; he frequently does not want any more than that amount. He is especially interested in master-ing the written language so he can read text and reference books and write acceptable papers. He is usually well selected and well motivated for his educational program.

The adult schools have students who may be strongly motivated, but who are often low on aptitude and short on time to study. Students in these schools are typically people with a full-time job who can come to class only two or three nights a week. The fact that they are adults means that the years when a new language would come most easily have passed.

The foregoing are considerations of the types of students available in practice teaching classes. Now let us consider the potential teachers, who may be native or non-native speakers of English. The native speakers are likely to do their intern service as university teaching assistants. This is potentially a useful experience, but often little or no supervision is given—the teacher education classes are not related to practice teaching in any meaningful way. Basic language courses in most American colleges and universities are assigned to the instructors or assistants who are lowest in seniority or rank, and the assignment is not infrequently considered little more than a subsidy to a promising or needy graduate student.

Little has been done to give intern practice in public or adult schools, and a closer cooperation between TESL programs and these users of trained teachers would undoubtedly benefit both.

It is more difficult to arrange intern service for non-native speakers of English in an American TESL program. Students who come to the United States to study insist on having a native speaker after traveling so far; public school programs usually work with teachers who intend to make a career of teaching in the United States, and the adult Americanization schools stress the requirement of citizenship, since this is a part of what they are teaching.

In many cases the foreign trainee has to forgo practice teaching or wait until he returns home for a chance to apply what he has learned. There are some substitutes for actual teaching, such as observation in a foreign language or an ESL classroom, peer teaching within the group of TESL trainees, and tutoring foreign students who have special problems. Sometimes a TESL trainee whose native language is not English can be assigned to teach his own first language to American students. These are only substitutes for supervised ESL teaching, but they are probably better than nothing.

If intern service can be arranged for TESL students and if there is any choice, what sort of classes should they practice teach? In a short-term orientation program for "teacher training," the classes should be closely representative of those the trainees will later teach. In a larger, more comprehensive program for "teacher education" this identification of training classes with subsequent teaching assignment is less important, perhaps should even be avoided. The teacher education student should deliberately be exposed to variety for two reasons: (1) it is not always possible to anticipate one's exact future assignment, which anyway may change, and (2) the teacher needs to develop flexibility to accept the new ideas that will be produced by future research and experience. This is an important difference between training and education: a person is "trained" to do a specific job but is "educated" to solve problems—whatever problems present themselves.

In the light of the above, what would be an ideal design for a one-year certificate or degree program in TESL? A two-semester sequence might include the following courses:

FIRST SEMESTER

1. Introduction to Linguistics
2. Phonology of English (including practical work for non-native speakers of English where needed)
3. Methods and Philosophy of Teaching English as a Second Language
4. Elective for non-native speakers (for breadth and flexibility); background language for native speakers.

SECOND SEMESTER

1. Contrastive Analysis
2. Grammatical Structures of English
3. Practice Teaching
4. Teaching Composition and Literature for Non-native Speakers; background language for native speakers.

This design would introduce all of the areas discussed earlier. It provides four to six courses of linguistics and two to three in education. Much more might be done in education, but it is assumed that most trainees will have had some experience or course work in general education before entering a graduate program.

The program could be expanded to include more specific courses in such subject areas as the design and construction of language teaching materials, language testing, psycholinguistics, audiovisual media, laboratory equipment and operation, bilingualism, language policy and official guidance, semantics, speech, comparative education, cultural anthropology, area specialization, and advanced problems classes in any of the course areas of the program. These would be appropriate to a longer program.

More and more colleges and universities have recognized the need for better teacher preparation in the teaching of English as a second language, and programs have been proliferating. Additional support has come from the national government, state offices of education, the large foundations, and other sponsors of TESL programs in this country and abroad. As we gain more experience, we should establish projects of program research, to determine which components are really effective and which should be rethought or omitted. In this way perhaps we can confirm what is good and improve the parts that can be made better.

A GENERATIVE GRAMMAR APPROACH*

Robert B. Lees

It seems reasonable to construe my task here today to consist mainly in conveying to you by means of a preassigned example and some explanation what the concerns of transformational grammatical studies have been, what their goals and results, if any, are, and how, if at all, they are related to the teaching of English. Now, that's a big order! Therefore, I shall have to omit much more than I shall cover, and you, unfortunately, may remain the less enlightened for that.

Because many of the descriptions produced by transformational grammarians have been couched in formidable, in fact, unnecessarily abstruse, formalisms, a most important general feature of these studies has been obscured; namely, a persistent effort to return to, and elucidate with contemporary methods, many of the oldest, most traditional questions of language study. In particular, the central task is to construct descriptions which express to the best of our present knowledge exactly what a competent user of a natural language must be presumed to know which enables him to construct correctly, and to understand effortlessly, indefinitely many sentences of his language.

Although (1) there may also be many other expressions for which he fails to display this competence,

(2) he may differ slightly in this ability, or his use of it, from others who are said to speak the same language;

(3) if asked directly, he may not be able to explain or even describe his knowledge;

(4) the nature of this knowledge may change slowly from generation to generation, or even through the lifetime of a single individual;

(5) the way a speaker puts his competence to use may depend also in part upon other factors than his knowledge of his language alone; nevertheless, we must believe that every mature user has in mind, discursively or not, a set of rules which specify the correct form for every sentence, exactly how it can be interpreted, and exactly how it can be pronounced.

To put this knowledge to use he must have other abilities; for example, he must possess some efficient heuristic device, or strategy, for guessing at the interpretation of an arbitrary presented utterance in accord with the rules he knows. He has still other abilities which enable him to learn to read and write. At least while a child, he must possess an innate ability to extract the rules of his language from samples of speech which he hears about him. He is able to interpret utterances in other dialects if they do not depart too radically from his own in their organizational principles. In any case, no matter what *other* abilities a person may or may not have, it seems reasonable to say that anyone who has mastered a language has learned, or internalized, a set of rules, or organizational principles, which specify the correct form, interpretation, and pronunciation of every well-formed sentence of that language.

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* *Editorial Note:* This and the following two papers were presented together in a session entitled "Three Different Approaches to the Treatment of a Grammatical Problem in English: The Relation between Forms of the Type 'He works' and 'He is working'." The three authors were given the assignment of analyzing this problem according to three current linguistic theories: transformational, signals grammar, and tagmemic.

Our central task is, then, to say explicitly for individual languages what those rules are and, in so saying, to specify the form which systems of such rules must have for any language. In this way we propose to study the nature of man's most characteristically human behavior, language.

Lest some confusion persist between this goal of linguistic science on the one hand and, on the other, the subject matter of grammar teaching in the schools, let me urge this distinction: ordinarily, in teaching school children about their language, the pupil is given some, usually unsophisticated, vocabulary for grammatical notions and is then required to parse particular, given sentences. At the same time, he is given the unmistakable, but mistaken, impression that the grammatical description of a particular sentence is derivable directly from its meaning, the meaning of its major parts, and certain characteristic, so-called grammatical, "signals."

First, it should be clear to us all by now that there is another indispensable source upon which the pupil draws when he performs this task. This source remains largely implicit in the classroom. It is, of course, the pupil's own knowledge of the organizational principles of well-formedness for sentences of his language.

Second, the grammar teacher's view invites us to beg the most important question of all: How does the pupil manage to understand the presented sentence in the first place so that he may use his understanding to aid him in assigning a structure to it? It is not difficult to see that our understanding of a sentence depends critically upon how we think it has been put together out of its constituent parts. There must then be an independent specification of grammatical form which a native speaker can "consult" to help him identify the meaning of an utterance.

Of course, it takes more than an assignment of syntactic structure to an utterance to decipher its meaning. We must also know all the possible meanings of each of its constituent words (insofar as they have meanings). Even this still does not suffice—witness the clumsy efforts of mechanical translation schemes. That is, we must also know *how* the meanings of the words are to be combined with one another to yield the meaning of the whole, and this knowledge too is principled and specifiable.

One very important result of our studies of linguistic behavior is the following: as has been realized for a long time, many of the organizational features of sentences are correctly representable by a labeled bracketing structure which specifies, to a certain degree, their internal decomposition into phrases; the way sentences are pronounced can then be specified by the application of a set of natural and well-motivated rules to these phrase-structure representations to map them into a phonetic representation in terms of distinctive acoustic features. *But,* there is *no* corresponding way to go *directly* from such bracketed strings of words to the *meaning* of sentences! That is to say, the relation between the phonetic form of a sentence as we utter it, or hear it, and the semantic form of that sentence as we understand it is very *in*direct.

A second important result of our studies is that, already on syntactic grounds alone, when we try to describe all the well-formed sentences of a language and state the principles of their internal organization, we are forced to assign to each one a very abstract representation, again in the form of a labeled bracketing of phrases, *from* which the outward form of the sentence is said to be "derived" by the application of natural and well-motivated rules, called, incidentally, grammatical transformation rules. *Then*, it turns out, the rules for reconstructing the *meaning* of a sentence also must be formulated over labeled bracketings of a special form, and the ones which are required are just these very branching diagrams which the transformational rules map into sentences! Thus, we have a very strong confirmation of the view that each sentence has two syntactic structures, its so-called *deep-structure,* and its *surface-structure,* as Chomsky has called them, and these are connected by transformational rules. The deep-structure is semantically interpretable (i.e., understandable); the shallow-structure is phonetically interpretable (i.e., pronounceable).

To turn now to our special topic, the two so-called "tenses" of English, the "simple" and the "progressive," let me say straightaway that the most important question for language teaching is clearly how to explain to a non-native speaker of English the conditions for correct *choice* of the one or the other form.

Of course, there are other, logically prior problems, namely how correctly to *construct* every possible verb phrase or sentence which contains the one or the other. But in the case of these two forms, construction is not difficult to learn for most foreigners—perhaps with the exception of the placement of certain preverbal adverbs. The really hard task is to learn when to *choose* the one, when the other.

I think it is reasonable to construe the question of construction to be almost exclusively a problem in syntax; the question of choice, largely a problem in semantics. The main contributions of transformational grammatical studies have so far been in the former area. Let me therefore first say a few words about the latter.

The transformational grammarian believes that many insights afforded by the study of transformational syntax will serve to reanimate the field of semantic analysis. In particular, the following conceptual innovations are essential:

1) The task of semantic analysis must be construed as an effort to elucidate not the immediate relation between expressions and the settings in which they are uttered but rather the abstract relation between expressions and their possible meanings in isolation.

2) The major task of a semantic description is to show how the meaning of a complex expression, say a sentence, is constructed out of the meanings of its constituent lexical items.

3) A semantic analysis must be formulated as a formal theory of projective rules and an assignment of abstract semantic features to morphemes, and this theory must presuppose and use the underlying, or deep, constituent-structure syntactic representation of sentences provided by the grammar.

Some morphemes will be treated accordingly as bundles of distinctive semantic features, roughly the category word definientia of ordinary dictionary definitions; such morphemes are the so-called "content words." Others may act merely as directions to the projective rules about *how* the semantic features of surrounding content words are to be combined with one another to yield the semantic characterizations of larger expressions; these are the so-called "function words," by and large.

One of the most interesting contemporary examples of relatively unformalized, traditional semantic analysis of some particular expressions appears in Martin Joos's recent book *The English Verb,* which I have just finished reading for the first time. In his description of what the various parts of the verb phrase mean, Professor Joos makes most of these distinctions I have spoken of, though sometimes only implicitly. In particular, he very wisely assumes that the auxiliary portion of the English verb phrase is represented abstractly as a sequence of six constituents:

Tns (M) (Have+En) (Be+Ing) (Be+En) V

The first and the last are obligatorily present; the intermediate ones are optionally chosen (of course, under certain constraints).

These constituents are:

1. *Tns:* Tense, either Remote (Past) or not (Actual, Present).
2. *M:* Any one of eight Modals of Relative Assertion or none (Factual).
3. *Have+En:* Phase, either Perfect when chosen, or Current when omitted.
4. *Be+Ing:* Aspect, either Temporary when chosen, or Generic when omitted (and this is the focus of our topic).
5. *Be+En:* Voice, either Passive when chosen, or Neutral when omitted.
6. *V:* Function, either Verbal if an actual content word is chosen, or Propredicate if elided.

Joos viewed his task as that of specifying, with supporting illustrations, the *meaning* of each choice or, perhaps more exactly, the effect on the meaning of any sentence of each choice. With very few exceptions, I found his analysis to be very illuminating and thoughtful. No comparable analysis has ever been offered by any transformational grammarian to my knowledge nor, for all I know, by any grammarian of whatever persuasion.

I believe that the underlying syntactic analysis which Joos presupposed was first advanced by Chomsky in his *Syntactic Structures,* and I adopted it myself, with very few modifications, in my *Grammar of English Nominalizations.* Since there is little I could add to Joos's description of English verbal meanings, and since a non-native student of English must be taught not only what the different verb phrases mean but also how to put them together correctly in declarative, interrogative, imperative, and passive sentences, it will not be amiss for me to review for you the underlying syntactic motivations for choosing just this abstract analysis.

Let us consider first the problem of specifying, in the most succinct way for someone who does not yet know English very well, exactly how to construct simple interrogative sentences. Immediately, a special problem of redundancy will arise in our specification. For example, we must say that when certain object-nouns are chosen, then only certain verbs can be used, and this for at least two different reasons. Thus, we have:

1) Did John obtain the sandwich?

but when the object is the noun phrase *the sandwich*, then the verb cannot be *attain*, though *obtain* is all right:

2) Did John attain the sandwich? (???)

is a semantically deviant, though probably understandable, sentence. Now, when the object-noun is *the goal*, then the sentence is semantically acceptable with *attain*:

3) Did John attain the goal?

Thus, there is a selectional constraint for semantic nondeviance on the choice of pairs Verb-Object.

But now consider the same case with the verb *abstain*:

4) *Did John abstain the sandwich?
5) *Did John abstain the goal?

and we see that, no matter what object-noun is chosen, the very *abstain* cannot be selected in such a sentence. In other words, the sentence is just not put together correctly—it is *syntactically* deviant. But there is no general constraint on the use of the verb *abstain* in question sentences:

6) Did John abstain from smoking?

Therefore, in specifying how all yes-no questions in English are constructed, we must include somewhere a constraint on the choice of certain verbs, such as *abstain*—they may be chosen only if followed by a complement expression in *from*, else the resulting sentence will not be well formed. And further, if the resulting sentence is also to conform to the semantic rules of English, certain verbs and nouns must be marked so that some of the possible combinations will be rejected as deviant.

There are many other such constraints which must be imposed upon interrogative sentences. For example, we can say:

7) Whom did John convince?

but not:

8) *What did John convince?

though there is nothing inherent in this particular sequence of words which is disallowed, for we also have:

9) What did John convince you of?

On the other hand, changing the verb, we have:

10) What did John evince?

but not:

11) *Whom did John evince?

But now notice that elsewhere in the grammatical description of English, where we attempt to specify the correct form of declarative sentences, exactly the same constraints will again have to be formulated to distinguish correctly among:

12) John obtained the sandwich.
13) John attained the sandwich. (???)
14) John attained the goal.
15) *John abstained the sandwich.
16) *John abstained the goal.
17) John abstained from smoking.
18) John convinced Bill.
19) *John convinced the bridge.
20) John convinced you of it.
21) John evinced great courage.
22) *John evinced Bill.

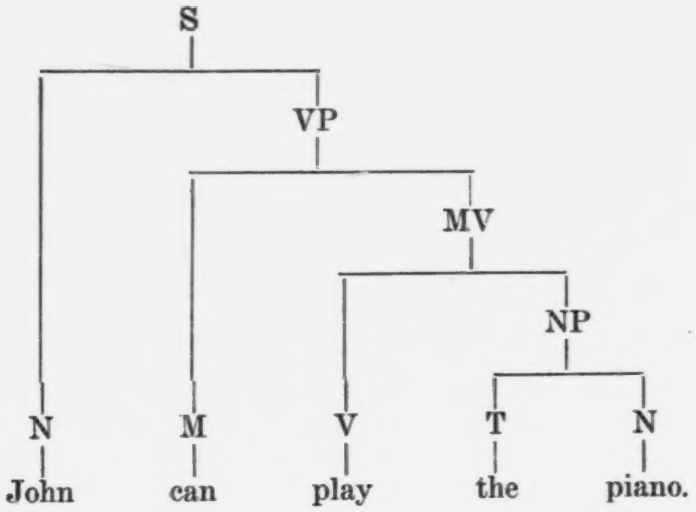
And that is not the worst of it, for there are still many other sentence types for which again the same constraints will have to be formulated.

Thus, it seems that our description cannot be freed of this uneconomical redundancy—we appear to be forced to state over and over again all these constraints and many others besides. As Chomsky pointed out in the middle fifties, there is only one way out—we shall have to specify the form of each interrogative sentence as a distortion of some declarative sentence into which all the required constraints have already been built.

In other words, if we construe sentence (1) as a version of sentence (12), (3) as a version of (14), (6) as a version of (17), etc., and if all selectional constraints are already imposed upon the source sentences (12), (14), (17), etc., and if each resultant interrogative sentence is constructed from its underlying source sentence by one and the same rule of distortion, then the constraints need *not* be stated over again for the interrogatives. And that is one of the main motivations for construing the syntactic structure of some sentences in terms of that of certain underlying sources.

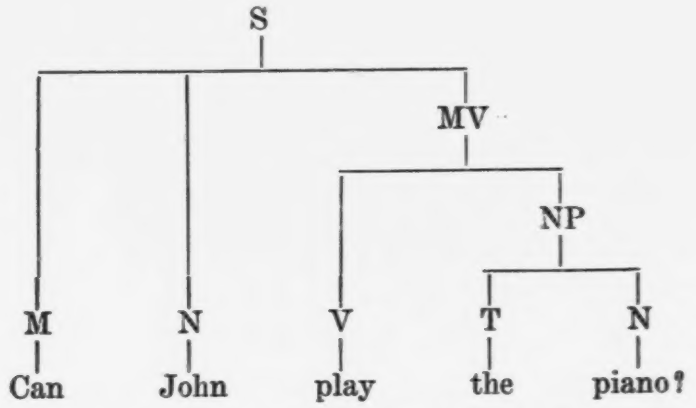
A second big problem now arises. We should like to explain the meaning of each declarative sentence in terms of the meanings of its subject noun phrase and of its verb phrase, the latter in terms of the meanings of its verb and of its object noun phrase, etc. But then the corresponding interrogative sentence in each case ought to contain the same internal phrases as does its source. We have already said that the internal constituency should be representable by means of a labeled bracketing tree-diagram, as in:

23)



Corresponding to this sentence is the interrogative:

24)



and we see that there is no way to represent the indisputable fact that (24) also contains a VP (verb phrase) containing itself an auxiliary modal M and a main verb MV, as in the declarative (23). Therefore, we shall have to say that the tree in (23) is the constituent-structure of not only that declarative sentence but also of the interrogative in (24). That is to say, (24) has *two* trees, an underlying tree as in (23) and an outward tree as in (24), and it is only the underlying one that yields the information that the interrogative sentence really does have a verb phrase *can play the piano.*

Next, we must ensure that there is in fact some one simple rule for each yes-no question to derive it from its source sentence tree, the one which underlies the corresponding declarative. As everyone knows, the basic rule is, of course, a transposition of the subject-noun and the first word of the auxiliary of the verb phrase, as in:

25) John is growing up. ⟶ Is John growing up?
26) John has grown up. ⟶ Has John grown up?
27) John has been sleeping. ⟶ Has John been sleeping?
28) John can't have been sleeping. ⟶ Can't John have been sleeping?

But now what shall we say of the case in which there appears to be no auxiliary at all?

29) John plays well. ⟶ Does John play well?

Note that the element which must precede the permuted subject-noun in the question is in every case the one which carries the marker of tense and, in non-past tense, the marker of agreement with the subject-noun. If, then, we were to represent (29) as though it too, like (25) through (28), had this tense element *before* the verb, it could undergo the same transposition rule as the others, thus:

30) John Tns play well. ⟶ Tns John play well?

Then we need only assume that the unpronounceable *Tns* element requires an obligatory prefix, the meaningless auxiliary *do,* whenever it has no verb immediately afterward to attach to.

This latter rule would then work thus:

31) Tns John play well? ⟶ Do Tns John play well?

and the sequence *do+Tns* is pronounced *does* when it is 3rd-person-singular non-past tense, as it is in this case.

Before we go on to the other elements of the auxiliary, let us first see why this seemingly roundabout analysis is really very economical and revealing. I'm sure it must occur to many foreigners to wonder why the meaningless tense carrier *do* is used not only in interrogatives but also in negative declarative sentences (and again in imperatives and emphatics). It is now easy for us to say exactly why these two types are similar in this respect, for if we note that the word *not* always intervenes after the first word of the auxiliary, as in:

32) John can not play well.
33) John is not sleeping.
34) John has not been sleeping.

then it is, as usual, in keeping with the regularity of English verb phrase formation to insert *not* also right after the *Tns* element when the latter is itself the only member of the auxiliary present:

35) John Tns play well. ⟶ John Tns not play well.

and finally, again with perfect regularity, we must then insert *do* to carry the unattachable *Tns*:

36) John do Tns not play well. ⟶ John does not play well.

Thus, the use of *do* in questions and negatives is actually a reflection of an underlying regularity rather than an *ir*regularity.

However, there is one little problem left. We have decided to represent the underlying declarative sentence with its constituents in an unpronounceable order, namely with *Tns* before its verb rather than after, where it ultimately belongs. Therefore, there must be a rule following the question-inversion and the *not*-insertion rules which affixes *Tns* to a following verb base if there is one (and which fails to apply if there is not, for that is the case in which *do* is automatically inserted to fill that office).

Now, finally, we may consider the other elements of the auxiliary constituent. We note that whenever the first word of this constituent is *be,* then the following verb-base must carry the suffix *Ing* in the active or more complex verb phrases or the suffix *Ed/En* in the passive, while the use of *have* as first word requires that the following verb-base carry the latter suffix *Ed/En* again. On the other hand, when the first word is a modal M, then there can be no suffix at all on the following verb-base. And even when the verb phrase is quite complex, as in sentence (28), each successive element selects a particular suffix on the next following word. Moreover, as Martin Joos's study of the meanings of the various elements in the verb phrase shows, these elements can best be treated as binary choices among four distinct constituents and an eight-way choice in a fifth.

Thus, on both syntactic and semantic grounds, it would seem that the best underlying representation is one in which each of these elements appears as a single unitary constituent: *be+Ing, have+En, M* alone, *Tns,* and *be+En.* Now the second part of each complex element is actually pronounced as a suffix on the following word. But we have already introduced a rule to shift *Tns* around any following verb-base. Therefore, we can safely represent each of the other elements in the desired unitary way, amend this rule very slightly so that it will act also upon the second member of each complex element, and then the underlying form of sentence (28) would be:

37) John Tns can't have+En be+Ing sleep.

The suffix-shifting rule will then yield:

38) John can+Tns+N't have be+En sleep+Ing.

pronounced:

39) John can't have been sleeping.

I cannot pretend that there are no irregularities in the formation of all English verb phrases, especially when we consider also the form of imperatives, verb phrases with other preverbal adverbs, or the reduced, or elliptic, forms, such as the so-called tag-questions. But by and large, I know of no description other than the one I have reviewed here which reveals as much inner regularity in the formation and interpretation of English verb phrases.

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THE ENGLISH TEMPORARY ASPECT

Martin Joos

My treatment of the peculiar English institution which differentiates *I work* from *I am working* is advertised as a "signals grammar" approach. This does not mean a radically new sort of discussion, for signals grammar is entirely within the tradition variously called Bloomfieldian or Saussurian or descriptive linguistics, recently also taxonomic linguistics, in which the aim is simply to present a map for the language or for the sample of text. (Text is a broad category in my terminology and includes samples of speech considered as repeatable.)

It was given the title "signals grammar" a few years ago, on an occasion when the contrast between this old tradition and the newer transformational grammar required to be characterized succinctly. From the traditional point of view, the crucial difference seemed to be that the transformationalists have rejected a tacit axiom of the older tradition, the axiom that *text signals its own structure.*

By retaining this axiom and yet attempting to develop linguistic theory further, signals grammar is forced to say that the taxonomy of *form* has become adequate—had indeed become adequate before the transformation people appeared on the scene—and that the next development in taxonomic linguistics would naturally cover the structure of meaning within the language—not that structure outside the language which is usually meant by "semantics," but instead the structures *within* the language which fit it for dealing with categorical meanings and which, as a system, I have called its "semology."

In short, the current period in the history of taxonomic linguistics is naturally characterized by its program for dealing with audible form and with meaning in a single discussion. *One* of those form-and-meaning programs is my sort of signals grammar, and my recent book on form and meaning in a part of English grammar, *The English Verb* (University of Wisconsin Press, 1964), is a typical, though of course extreme, case.

When we have said that text signals its own structure and have added that we are interested in form and in meaning together, two sorts of consequences emerge. First, both meaningless form and formless meaning are disregarded. Meaningless form would be, for example, the morphophonemic difference between *break* : *broke* : *broken* and *take* : *took* : *taken*; this becomes uninteresting. Formless meaning would be, for example, the semantic difference between taking a leave of absence and taking a leaf from a book—I mean the difference between one *taking* and the other *taking*—and this likewise becomes uninteresting. In technical terms, both morphophonemics and semantics are automatically excluded from a basic study of formal meaning and meaningful form. This is a necessary limitation when you want to develop a basic theory, and it is no worse than developing the basic theory of falling bodies while disregarding both magnetism and the friction of the air.

Second, the simplicity principle now calls for perhaps delimiting the forms and the meanings differently than we would delimit the forms for morphological purposes or the meanings for semantic purposes. That is to say, we ask "How much form has one meaning?" and our answers constitute an appropriate dissection of form; and we ask "What is the elementary piece of meaning that corresponds to a single formal signal?" and our answers constitute an appropriate dissection of meaning, each dissection being appropriate to the other.

Before proceeding to exemplify this program, let me show you one which, as I believe, will not work. If we take the two sentences:

I have shown it to her.
It has been shown to her.

and try to find a meaning for the word *shown* which will be the same in them both—a single meaning for *shown* that is effective in both sentences—we find nothing there beyond the lexical meaning of SHOW. Traditionally, shown is a "past participle" in each of the two sentences; but that tradition is useless to us. If you don't believe this, try it and see.

The trouble is that *shown,* although we still admit that it is an immediate constituent in the phonological shape of each sentence, is NOT an Immediate Constituent (I.C.) of either sentence *with respect to meaning.*

What are the I.C.'s of an English verb with respect to meaning? The solution which works best for me is one which I have borrowed from the transformational grammarians. It is displayed on p. 130, first 15 lines.

Each marker takes care of one minimal feature of meaning; and nothing less nor more than one marker does that. For example, the BE of the Aspect marker, and likewise the BE of the Voice marker, is nothing by itself as far as any effect on meaning is concerned; and the same is true of the hyphened bits: all such things are meaningless.

What does have meaning is the partnership of BE and -ING together, and in the other case the partnership of BE and -N together. Three of the six marker categories are of this twin-fragment sort. One marker is only a suffix: the tense marker -D. One family of eight look like words: the Assertion markers. And the last marker, where SHOW is given as a stand-in for all the thousands that English has, looks most of all like a word. Most of this is so easily understood that the schema as a whole is entirely misleading until it is fully understood.

The solution is that a finite verb in English, consisting of one to five or six words, comes into existence only by combining the markers used according to the rule that each hyphened bit is a suffix to the next item in use—not the whole next marker in every case, for the suffix goes only with the *first* half of HAVE -N or BE -ING or BE -N. Finally, there are the morphophonemic rules which we take for granted, e.g., the rule that -D BE = *was* or *were*—one or the other according to rules of concord which do not concern us either.

THE ENGLISH TEMPORARY ASPECT

1 The marker BE -ING is a split Immediate Constituent of the *form.*

2	Category:	TENSE	ASSERTION	PHASE	ASPECT	VOICE	FUNCTION
3	Unmarked:	actual	factual	current	generic	neutral	propredicate
4	Marked:	remote	relative	perfect	temporary	passive	verb
5	Markers (and zeroes):						
6	Go only to the right or through any gap. A hyphened bit is a suffix to the next item used; it vanishes if last.	(-S)		(DO)			
7		-D		HAVE -N	BE -ING	BE -N	SHOW **etc.**
8			WILL				
9			SHALL				
10			CAN				
11			MAY				
12			MUST				
13			OUGHT TO				
14			DARE				
15			NEED				

16 Like all the other markers, it has only *privative* meaning.
17 It means "the predication is (only) temporarily valid."
18 With *status* lexemes it is very rare but is never excluded
19 in context providing for interpretation as a temporary
20 *intensity*: The baby *is resembling* his father *more now.*
21 (Status lexemes designate *relations* including *psychic states*: SEE, RESEMBLE,
22 INTERSECT, SUPPOSE, MATTER, BELIEVE, LIKE . . . 300 of them?)
23 Apart from contemporary comment, BE -ING is barred when the
24 event advances the plot: I *worked* in Chicago all that winter.
25 vs. I *was working* in Chicago when I met her.
26 Validity can be non-temporary in two ways:
27 (1) by extending *beyond any era* worth assuming, as in
28 Postmen *work* in the postal service.
29 (2) by confinement to a time *too short to be an era,* as in
30 I *declare* the meeting adjourned; or
31 Look: I *turn* this knob and it *works.*
32 In *Trial* (British corpus having 8038 finite verbs) we find
33 temporary aspect in 5/6% of the relative [modal] assertions,
34 but in 7% of the factual assertions: 11/1338 and 399/5700.

So much for form. Of all the markers, each is either used or left unused, independently of whether any other is used or left unused; and the significantly different results are 224 in number, which makes the English finite verb a strong competitor to the verb of Classical Greek in its elaborateness of form and its subtlety of meaning.

Now what kinds of meanings do these markers have? For a complete answer, see my book *The English Verb.* Here we are concerned with only one of them: the Aspect marker BE-ING. Like all the other markers, it has only privative meaning. That is to say, the meaning of the temporary aspect is *part of* the range of meaning of the generic aspect, NOT a contradiction of it. What the marker does to that range of meaning is to *delete* all but a part of it.

Therefore, the unmarked or generic aspect can have the meaning of the temporary aspect as *one* of its own meanings, while the *other* meanings of the generic aspect cannot be conveyed by the marked or temporary aspect. This is why we can say either "Aren't you feeling well?" or else, with identical meaning, "Don't you feel well?" We all know that not feeling well is a temporary thing, and that knowledge makes the aspect marker redundant.

Still, this example may be misleading here. It does not bring out one essential fact about English temporary aspect which distinguishes the English aspect category from the different sort of thing that is called "aspect" in Russian and certain other languages. In those other languages, their aspects tell us something about the nature of the *event*. English aspect instead tells us something about the *predication*. Russian aspect is a *referent* category, telling something about what is spoken of; English aspect is a *message* category, telling us something about what is spoken. Specifically, the English temporary aspect says that the message *is not valid* outside of a considerable but limited span of time. The argument by which this can be proved is too long to be included here; see the book, where there is no formal proof either, but there is an adequate verification from a corpus of English text.

Now this is a piece of linguistic theory which is not to be taught to a foreign learner of English. The place for it is in the construction of the teaching materials and in the training of the teachers—so that the books will no longer say "I sit down now" as that book does that Mrs. Allen told us about, and the teachers will refuse to use any book that does. All I can do here is to display part, far from all, of the habits for using our temporary aspect. There is more of this on p. 130, but even then there isn't room for all of it.

What I will do in closing is only to call attention to the simplicity of this description. I offer no long list of *uses* of the two aspects, such as you can find in many books; instead I offer a single *meaning* for the marked aspect, and if you will apply this single meaning test to all that list of uses, you will see that it works every time. The nearest thing to a list here is the remark in lines 23 to 25 of p. 130, which seems to say that temporary aspect has *two* meanings. It does not. That remark is based on the fact that the addressee *is a competent witness* to the truth of a contemporary comment, and is not a competent witness to the truth of any other use of a verb. And after all, language is, to speak figuratively, designed for social employment, and we must not expect any description or theory to guide a learner who wants to learn a language abstractly. We always need the footprints in the concrete.

ITEM AND FIELD:
A WAY INTO COMPLEXITY

Alton L. Becker

My purpose in this paper is to show how Tagmemic field theory [1] approaches the problem under discussion—the difference between the expanded and unexpanded verb forms in English, specifically the difference between the so-called present tense and progressive aspect. I hope to make two major points: (1) that verb expansion can be seen as a partition of a semantic field, and (2) that the criteria for the selection of a particular verb form are to be found in structures larger than the sentence. As secondary points I shall discuss briefly grammatical meaning, sequence of tense, and two kinds of field operations. I must say now that this paper is a report on work in progress: as yet we have no complete and elegant solution of the problem of verb expansion.

Before turning to the problem, I would like to discuss for a moment Tagmemic field theory in general, some of its history, and its relation to other linguistic theories. In his 1954 article, "Two Models of Grammatical Description," Charles Hockett describes two general approaches to grammatical description which have long been called "item and arrangement (IA)" and "item and process (IP)." Both of these models assume primitive units or items and then either describe their occurrence in a linear sequence (IA) or state a series of rules or operations by which items are combined (IP). Though no modern linguistic theories are purely IA or IP, these terms continue to be useful in differentiating, generally, various approaches to grammar. It is with a third model that I will be concerned here, one which Hockett mentions only briefly. In his words,

> . . . there is one model which is clearly distinct from either IA or IP, and which is older and more respectable than either. This is the *word and paradigm* (WP) model, the traditional framework for the discussions of Latin, Greek, Sanskrit, and a good many more familiar modern languages. It will not do to shrug this frame of reference off with the comment that it is obviously insufficiently general, incapable of organizing efficiently the facts of a language like Chinese. As yet we have *no* completely adequate model.[2]

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[1] Field theory, particularly the use of matrices, is discussed in several recent articles, among them Kenneth L. Pike, "Dimensions of Grammatical Constructions," *Language*, 38.221-44; Pike, "A Syntactic Paradigm," *Language*, 39.216-30; Pike, "Theoretical Implications of Matrix Permutation in Fore (New Guinea)," *Anthropological Linguistics*, 5.8.1-23; Pike and Barbara Erickson, "Conflated Field Structures in Potowatomi and in Arabic," *International Journal of American Linguistics*, 30.3.201-212; and Robert E. Longacre, "Prolegomena to Lexical Structure," *Linguistics*, 5.5-24.

[2] Charles Hockett, "Two Models of Grammatical Description," reprinted from *Word*, 10.210-31, in *Readings in Linguistics*, ed. Martin Joos (New York: American Council of Learned Societies, Columbia University Press, 1957), pp. 386–399.

Currently those of us working in Tagmemics have been developing a theory of language description based on the traditional paradigm—though Tagmemics continues to affirm the relevance and necessity of the other two points of view (IA and IP) as well, considering all three essential to a complete description of a language. By adding to the idea of the paradigm various newer concepts and operations—some of them from matrix algebra, set theory, and componential analysis among others—we believe that we now have a new model: field theory or item and field. Field theory, though not yet adequately formalized, has given us important insights into the more subtle problems in linguistics and has also found wide applications outside of linguistics—in anthropology, semantics, literary analysis, and other fields of inquiry.[3]

A paradigm is a systematic arrangement of a *class* of linguistic forms. The words in a traditional paradigm are mutually exclusive; we choose one of them in generating a sentence because of some constraint present in the larger context—grammatical, phonological, lexical, semantic, or psychological. These constraints are given labels which describe the categories in the paradigm: first person, second person, singular, plural, present tense, etc. The labels ideally indicate relationships of the forms in the paradigm with other forms in other paradigms. For instance, the category first person in a verb paradigm indicates that the verb forms in that category have a particular relationship with a similarly labeled category in the subject paradigm. Let me emphasize this statement, for I will return to it later: the labels of categories in grammatical paradigms (or, as we call them, matrices) indicate one or more relationships or distributional functions in a hierarchy of systems. It is this pattern of functional relationships that I will call grammatical meaning.

The unexpanded English verb forms are traditionally ordered in a paradigm with categories labeled first, second, and third person, singular and plural, present and past indicative, present and past participle, etc. In order to simplify our analysis of the problem before us, I will exclude the person and number categories because I don't believe they are relevant here. We might then have a paradigm like Paradigm I.

	Present	Past
Indicative	works	worked
Participial	working	worked
?	work	

Paradigm I[4]

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[3] Publications using some form of field theory include Philip K. Bock, *The Social Structures of a Canadian Indian Reserve* (Harvard Ph.D. dissertation, 1962); Kenneth L. Pike, "Beyond the Sentence," *CCC*, 15.3.129-135 (October 1964); Hubert M. English, Jr., "Linguistic Theory as an Aid to Invention," *CCC*, 15.3.136-140 (October 1964); Alan B. Howes, "A Linguistic Analogy in Literary Criticism," *CCC*, 15.3.141-144 (October 1964).

[4] The bottom row in Paradigm I is unpartitioned, meaning that there is no contrast in the column categories. To partition this row and show identical forms in each cell would needlessly complicate the presentation and possibly suggest more than necessary, e.g., that the forms are the result of a historical merger.

The labels are troublesome and inconsistent. Some like "indicative" and "present" indicate a psychological use of the forms. "Participial" describes a derivation, and the bottom row has no name that seems to fit modern English. I will relabel the categories and keep the grouping, which seems intuitively right and proves useful, for it recurs in verb expansion.

We can make several relevant observations on this grouping or pattern:

1) Forms in the top row can function as finite verbs without further modification being necessary. To indicate this I will label the top row terminal.
2) Forms in the second row require restriction in order to be terminal. I will label them r^1.
3) The form in the third row may function as the imperative, or be preceded by modals or the particle "to." I will for convenience label this form r^2.
4) Looking now at the columns, we note that the distinction is not entirely relevant to verb expansion, at least in the first row. The difference between *works* and *worked* cannot be described in terms of a relationship within the verb phrase itself. The constraints on the selection of Column 1 or Column 2 are to be found in the larger context. I will retain the label *past* for column 2 because I think the label can be shown to indicate a structural relationship. Column 1 I will just label *X*. I have not found a term that indicates its function.[5]
5) As an interesting aside, we observe that there is a neutralization of contrast with *work* and many other verbs in the second column. We have described this sort of merger elsewhere as a result of vector or category pressure in time.[6] That the contrast in Column 1 is always maintained indicates something of the importance of the distinction (i.e., between *works* and *is working*) in the structure of the language.

Our paradigm is now relabeled as in Matrix A. (I will now use the term *matrix* as we move further away from the traditional paradigm.)

	X	P(ast)
T	Vs	Ved
r^1	Ving	Ven
r^2	V	

MATRIX A

This simple matrix (Matrix A), showing the intersections of categories of grammatical meaning,[7] displays, to use spacial terms, a grammatical field, a partitioning or mapping of the English speaker's psychological environment. An English speaker must make a choice from this ordered set to fill a tagmeme in an English sentence. The field of choice in another language will be different.[8]

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[5] The label "non-past" is rejected for two reasons: (1) it does not indicate the distribution of the forms in the first column, and (2) it suggests that the only difference between the columns is tense. "Non-past" like the traditional distribution label "elsewhere" is a useful label but not really, I feel, a semantic category.

[6] See Kenneth L. Pike and Alton L. Becker, "Progressive Neutralization in Dimensions of Navaho Stem Matrices," *International Journal of American Linguistics*, 30.2.144-154, where we discuss historical change from the perspective of field theory.

[7] Grammatical meaning should, I feel, be limited to relational meaning in the grammatical hierarchy; the two sorts of labels thereby permitted are the labels of Tagmemes and of categories of matrices which manifest Tagmemes.

Some of us in Tagmemics now consider that a sentence can be viewed as a string of matrices filling functional slots in a construction, modifying the definition of a tagmeme so that it is not just a functional slot and filler class but a slot and an *ordered* filler class or matrix.[9] Generating a sentence is therefore conflating a string of matrices. Conflating matrices, is, roughly, an operation superimposing one on another, somewhat like looking down through a three dimensional tic-tac-toe board. I will describe expanded verb forms as conflations of parts (i.e., cells) of Matrix A with other matrices. To simplify here I will focus on the conflation producing the "progressive" matrix. Other conflations operate in a similar way.[10]

Only one cell of Matrix A is to be conflated with Matrix B to produce the "progressive" forms: the cell Ar^1X (i.e., the cell at the intersection of the row r^1 and the Column X in Matrix A). Other cells can also be conflated with Matrix B and other matrices.

	X	P
T	is—	was—
r^1	*being—	been—
r^2	be—	

Matrix B

The conflation produces the included Matrix C (i.e., Matrix C is the partitioning of a single cell in Matrix A and therefore is included in A).

	X	P
T	isVing	wasVing
r^1	*beingVing	beenVing
r^2	beVing	

Matrix C

($Ar^1X \circ B$)

(Note: the symbol "°" indicates conflation)

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[8] Comparative works using matrix theory (as yet unpublished) are being done by the author on Malayo-Polynesian verb matrices and by Manindra K. Verma (University of Michigan) on a grammatical comparison of Hindi and English.

[9] See Kenneth L. Pike, "Some Morphological Matrices in German," a paper given at the winter meeting of the Linguistic Society of America, December 30, 1964, to appear in *Zeitschrift fur Mundartforschung.* Pike here shows conflation across tagmemes in a construction.

[10] It should be noted that conflation is but one operation in the Tagmemic generation of language. There are also *reading, permutation,* and *exponence* operations, discussed in Robert E. Longacre, *Grammar Discovery Procedures* (The Hague: Mouton and Company, 1964), chapter 1.

Matrix A can now be represented as in Matrix A^1.

<table>
<tr><td></td><td colspan="2">X</td><td>P</td></tr>
<tr><td>T</td><td colspan="2">Vs</td><td>Ved</td></tr>
<tr><td></td><td>X</td><td>P</td><td></td></tr>
<tr><td></td><td>isVing</td><td>wasVing</td><td></td></tr>
<tr><td>r^1</td><td>*beingVing</td><td>beenVing</td><td></td></tr>
<tr><td></td><td colspan="2">beVing</td><td>Ven</td></tr>
<tr><td>r^2</td><td colspan="3">V</td></tr>
</table>

MATRIX A^1

The conflation produces a field with categories exactly like those of Matrix A, although we might consider that cell r^1X of Matrix C (e.g., *being working*) is not manifested by most English speakers. What we have produced by conflation is a partition of cell Ar^1X which is congruent with the matrix as a whole. Not all conflations produce congruent fields (e.g., the conflation with the modal matrix).

The cells in r^1 and r^2 of Matrix C could now be further conflated to produce further expanded forms like "has been working," "could have been working," etc. These matrices and the operations used in conflating them yield an operational definition of English verb expansion.

Let us turn now to the central problem which concerns us today—the difference between forms like *works* (A_{TX}) and *is working* (C_{TX}), which might be restated as the difference between the terminal forms in Matrix A and the terminal forms in Matrix C. The fact that the field structures of Matrix A and Matrix B are congruent indicates that the difference in meaning is a property both of cell Ar^1X and Matrix B. We have said that meaning in field theory is a structural relationship or a function in a larger context. So the question is, what are the differences in function of the two forms A_{TX} (*works*) and C_{TX} (*is working*)?

Recent work in Tagmemics has been concerned with discourse analysis, describing structures beyond the sentence: paragraphs, poems, and other extended discourses.[11] The difference between expanded and unexpanded verb forms shows up clearly in these larger structures.

Let us now look at these different forms in a sample paragraph, using it as an illustration of my generalizations. The following paragraph is from a recent copy of *The Atlantic;* it is the initial paragraph in the article.

> Early in September rumors *were coursing* around Bonn's corridors that the West German government of Professor Ludwig Erhard *was* in danger of falling. These rumors *were* at least in part the product of the "silly season," which normally *descends* on the politically overbusy and self-conscious Federal Capital a year before a Federal election. The length of the silly season *is* predictable—it *begins* in September, when Bonn's parliamentarians *reassemble* after their summer holidays,

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[11] See references to Pike, English, and Howes in footnote 3.

> and *lasts* until shortly after Christmas, when they *begin* to treat the approaching election with becoming seriousness. It *produces* no crises, but a lot of chatter.[12]

The paragraph might be called narrative-expository. It begins as narrative and then shifts to exposition in the middle, a shift signaled in part by the change in verb form from A_{TP} ("were") to A_{TX} ("descends") or from the P form to the X form of the unexpanded verb. The first sentence gives us an orientation in time, signaled both by the phrase "Early in September" and by the expanded verb form "were coursing" (C_{TP}). Once the time is established, with special focus on early September, the succeeding verbs are unexpanded forms, past tense forms until the shift.

The paragraph contains two verb sequences which are not coterminous with sentence boundaries: (C_{TP}, A_{TP}, A_{TP}) and (A_{TX}, A_{TX}, A_{TX}, A_{TX}, A_{TX}, A_{TX}, A_{TX}). What is often called the sequence of tenses is marked in our notation by the column symbols P and X. We see that verb forms, like the articles *a* and *the*, function, in part, as sequence markers.[13] Let us now examine the shift in the first sequence from the C form to the A form.

The C form (*were coming*) indicates a temporal orientation in which the action is occurring. When the second sequence of verbs begins (with the verb *descends*), there is no temporal orientation. Time is not in focus. But, returning to the first sequence, couldn't we just as well have had an unexpanded form in the first clause: "Early in September rumors *coursed* around Bonn's corridors that the West German government . . . etc."? What is the difference? With the unexpanded (A) form we lose the special *focus* on a process in time. It is here that the difference between unexpanded and expanded forms seems to become clearer. The expanded (C) forms focus attention on a *part* of the total field or meaning of the unexpanded (A) forms. By the addition of an adverb we can make a clause with an unexpanded (A) form focus on temporal process: we need only add an adverb like *continually*.[14] A sentence with an unexpanded form is probably able to signal any meaning that a sentence with an expanded form can signal (except, possibly, expansion with modals). That is, *works* means (or can mean with additional modifiers) everything that *is working* means, but *is working* means only part of what *works* means.[15] Expansion is therefore restriction of field, and restriction can occur in the verb phrase or elsewhere in the sequence of conflations in a sentence, e.g., by conflation of verb with adverb. This is what I meant earlier when I said that expansion is a partition (by the process of conflation) of the field of the unexpanded form. One can say, "Anything you buy from them works" not "is working," but in any sentence containing *is working, works* can be substituted.

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[12] "The Atlantic Report: West Germany," *The Atlantic*, January, 1965, p. 24. Italics are mine.

[13] See also Robert L. Allen, *The Verb System of Present-Day American English*, Columbia University Ph.D. dissertation to be published by Mouton and Co. Allen writes, "Perhaps the most important tie between one sentence and the next—a by extension, between most of the sentences in a given passage—is the identified time [to which we have given the cover symbol 'X'] common to all or most of them.' This 'X' runs like a thread through all of the sentences of a well-written passage; repeated 'breaks' in the thread result in disjointed, 'choppy' writing which is often difficult to follow. Fries discusses the use of pronominals and of the definite article as 'sequence signals,' but he does not mention identified time. (Charles Carpenter Fries, *The Structure of English* [New York: Harcourt, Brace and World, Inc., 1952], pp. 241–246). And yet the morpheme $\left\{ -d \right\}$ is as much of a sequence signal as the definite article *the*." p. 306 footnote.

[14] This is conflation of a different sort from that which we have been discussing; we might call it *lexical conflation*, in which the restriction of the field is accomplished by selecting a particular lexical item rather than a grammatical form.

This is not to say the substitution won't sound a bit awkward at times. Just as there are instances when the expanded form is not used, there are also instances when we conventionally use the expanded form. If I say, "Last week I was walking along State Street when all of a sudden a fire truck came tearing out of the station," I don't think I would substitute "walked" for "was walking"—unless I added an adverb which restricted the meaning to a continuous action, e.g., "Last week I walked *slowly* along . . . , etc."

For want of a better term, I would therefore describe the meaning of Matrix C as *temporal* or *process focus,* for it seems to focus our attention on that aspect of the unexpanded form. It might be better now to call the forms in Matrix A unpartitioned forms, for the process we have called "expansion" is a process of restricting rather than adding meaning. As I have suggested by discussing verb forms in a paragraph, I think that the label *temporal* or *process focus* can be shown to be an indication of functional relationship in a larger system. We go on to define the function of these forms operationally in paragraph matrices.

I have certainly not shown, with any degree of completeness, the difference between *works* and *is working* in this paper, but I hope I have made clear how Tagmemics approaches the problem. By using matrix conflation, I have suggested (1) that the process of verb expansion can be considered a partition of the semantic field of the unexpanded form, and (2) that criteria for the selection of a particular form are to be found in structures larger than the sentence.

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[15] The notion of expansion as restriction of meaning seems close to Joos's idea of privative meaning, in *The English Verb: Form and Meaning* (Madison: University of Wisconsin Press, 1964). Joos writes, "Now it has become clear what the marker BE-ING of the temporary aspect does: from among all the possible aspectual significances of the generic aspect, it singles out one by *obliterating all the others*. In one word, its significance is *privative*. . . ." p. 112.

BILINGUAL SEQUENCES AT THE SOCIETAL LEVEL

Joshua A. Fishman

All who are involved in the process of teaching English to speakers of other languages are involved in much more than a pedagogic endeavor alone. Rather, they are involved in an undertaking of great psychological, sociological, cultural, political, and economic complexity—an endeavor which, if cumulatively successful, may profoundly affect not only the verbal behavior but also the creativity, the family structure, the religious observances, the governmental preferences, and the health and welfare of millions.

Languages are far from neutral carbon copies of each other in terms of their interaction with human values, traditions, and aspirations. Languages "represent" *particular* national histories and *particular* national goals much more definitely than such avowedly representational cultural forms as painting or sculpting. In the same way that national histories and national goals are not interchangeable, so the languages associated with them are far from interchangeable. If successful, the teaching of English to speakers of other languages in the latter part of the twentieth century could and should lead history in other directions than would the successful teaching of Russian, or Chinese, or French.

Nevertheless, having thus strongly affirmed the *unique* consequences of extending the hegemony of one "language of wider communication" versus another, it nevertheless also remains true that all of these unique consequences are subsumable under a few rather *general* dimensions. These dimensions have long interested students of the sociology of language, particularly those who have been concerned with language maintenance, language shift, and multilingualism more generally. Whatever else the successful introduction of English may accomplish, it will initially increase multilingualism (that being the topic of this paper), it will initially displace other languages from one or another domain hitherto controlled by them, its spread will be opposed by forces dedicated to the preservation of linguistic and other traditions, and its expansion will be caught up in the struggle that inevitably arises between contending forces in situations of sociocultural change.

1. Intergroup Bilingualism

When English is introduced in a concerted manner into a society where it has hitherto been scarcely known, the initial result is the appearance of intergroup bilingualism. Those who know English are not only few in number and atypical in sociocultural position, but they do *not,* as a rule, speak English to each other. Rather they serve as carriers and interpreters of contact between their native society and the English speaking world. They become translators and conveyors of the social, political, economic, and cultural interests and pressures of the English speaking world to their native society. They may also become the major interpreters and conveyors of the image of their native society to the English speaking world.

This is the kind of bilingualism with which most Americans are familiar. Foreign language instruction in the United States is popularly rationalized in terms of this kind of bilingualism, the kind that will enable Americans to order a meal or to get along with a date in Rome. G.I.'s who spoke French, Italian, or German were useful to have around during the war because of the intergroup role that they could play. The Foreign Service Institute is eager to teach its students these and even more exotic languages because of the importance of direct, natural, and reliable intergroup communication in the conduct of foreign affairs. However, after all is said and done, intergroup bilingualism is only *one* societal pattern of bilingual functioning, and a rather atypical one at that when viewed in worldwide, historical perspective.

The atypicalness of intergroup bilingualism may be seen from the fact that it leaves the "masses" on both sides of the few translators quite untouched. The truth is that intergroup bilingualism implies societal monolingualism. Furthermore, although the translators, as middlemen, are bilingual, their bilingualism is usually of quite a specialized variety—concentrating on the rather narrow range of media, domains, social occasions, and role relations that their particular middlemanship calls for. When they are among themselves, they normally put English aside for the vernacular, which is more authentic for them. These facts may explain why intergroup bilingualism is rarely seen as the ultimate goal of those who plan and conduct large-scale programs of second-language learning, including programs for the teaching of English to speakers of other languages.

2. Stable Intragroup Bilingualism

a. Elite Bilingualism

In terms of such large-scale programs, *intergroup* bilingualism is merely a way station, a temporarily satisfying achievement in the pursuit of more desirable *intragroup* goals. One of the directions in which intergroup bilingualism can develop, given further support for it, is that of *elitist bilingualism.* Here we find that although the group of bilinguals is still small, its bilingualism has been internalized. Elitist bilinguals speak their "other" tongue not only when communicating with foreigners. Indeed, they may not serve in translating or in ambassadorial roles at all. They speak their "other" tongue *to each other,* at least in specific contexts. Thus, elitist bilingualism is one form of *intragroup* bilingualism.[1]

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[1] The internalization of a "translation language," to the degree that it comes to be used for within-group purposes (including the nuclear family), and, to the extent that it is acquired in early childhood by the young, also marks the transition from pidgin to creole status. That transition is presumably different from the one sketched here in that (a) pidgins are *ab initio* mixed languages in which the vocabulary of the lenders and the grammar of the borrowers are combined, and (b) pidgins have a mass rather than an elitist base. Nevertheless, it may be expected that large-scale programs to teach English to speakers of other languages will, indirectly, also increase the number of English-based pidgins and creoles, each somewhat different from the other. In the long run, several different (and only partially mutually intelligible) varieties of standard English may become entrenched (e.g., Indian English, West African English, etc.) as an indirect result of the widescale learning of English by speakers of other languages, many of whom will have only imperfect models to learn from.

In various parts of the world and at various points in time different foreign languages have been "adopted" by various elites. There was a time when Norman French was an adopted language of Anglo-Saxon elites in Britain; there was a time when Occitan (Provençal) was an adopted language for elites in north central France and northern Italy, when Russian served in this manner in Poland and in the Ukraine, and, more recently, when Parisian French served in this way throughout most of the Western world. It is only in comparatively recent days that English has been adopted as an intragroup language of elites in Africa, Asia, South America, and elsewhere. I take it, however, that elitist bilingualism is also not what those who are interested in teaching English to speakers of other languages most usually have in mind as their ultimate goal. What other alternatives are there?

b. Widespread Bilingualism

Another very common pattern of societal bilingualism is that which is referred to as "widespread bilingualism," in view of the fact that it has a much more substantial intragroup population base when contrasted with elitist bilingualism. This is the pattern in which a single culture recognizes two or more languages as its own, each for quite specific purposes. As a result the languages come to stand for different kinds of activities, different levels of formality or familiarity, or different emphases in interpersonal relations. Whereas in elitist bilingualism one language continues to be recognized as a "foreign" tongue (in contrast with the local vernacular), in widespread bilingualism this is no longer necessarily the case, for both languages have been domesticated or indigenized by dint of long standing familiarity with them. Whereas in elitist bilingualism one language continues to have primarily exclusivistic social class connotations, in widespread bilingualism this is no longer necessarily the case. Each language has a definite and important role allotted to it, and, therefore, both must be utilized to some extent (with or without full understanding or mastery) by all who have a sufficiently varied repertoire of topical or behavioral interactions.

Widespread bilingualism (sometimes referred to as superposed bilingualism and as diglossia) may involve two languages that are genetically related (as in the case of Schwyzertütsch and High German in Switzerland; classical and vernacular forms of Arabic in Egypt, Syria, Iraq, or Morocco; classical and vernacular forms of Greek in Greece; Sanskrit and Hindi in India, etc.). Widespread bilingualism may also involve genetically unrelated (or very distantly related) languages (as in the case of Spanish and Guarani in Paraguay, Yiddish and Hebrew among Eastern European Jews, Italian and Maltese in Malta, etc.). In either case, it is important to note that:

> a) The type of bilingual functioning involved usually is that which psychologists have termed coordinate or independent. This means that individuals are not free to choose whichever language they prefer in order to discuss whatever they wish with whomever they wish. Certain interpersonal relationships and certain activities and situations require language X and others require language Y. Rapid translation ability between the two (or interference between them) is rare, for the two languages hardly ever meet. It would be as wrong to speak to one's wife and children in

classical Arabic (or in classical Greek or in High German, or in Sanskrit, or in Hebrew, or in Spanish, in the above mentioned diglossia situations) as it would be to conduct religious services in vernacular Arabic (or in vernacular Greek, or in Schwyzertütsch, or in Hindi, or in Yiddish, or in Guarani). With democratization and modernization there may be greater opportunity for the lower classes (including women) to master the more restricted, superposed variety (as has been the case in postwar Greece and Egypt, for example). However, even then there is often little immediate interest in displacing it from its proper domains by expanding the exclusive domains of the vernacular. The superposed variety is not viewed as a foreign tongue, and it is not merely a symbol of status snobbery. It is a "cultural positive" of *all* the people (even though most do not understand it fully nor use it with ease).

b) Although widespread bilingualism may continue for centuries, each new generation must be "converted" to bilingualism by special institutions established for that purpose. The members of each new generation spend their earliest formative years as *monolingual* speakers of the vernacular. This is due to the fact that the home and family domain is assigned to one and only one of the recognized languages. That language is also destined to be the language of the street and neighborhood, the normal language among good friends and contemporaries, the language of dependency, intimacy, and solidarity. The "other" (superposed) language is taught by the school, by the church, by the government, or by some other societal arm which necessarily intersects the life space of each individual. Thus, widespread bilingualism preserves substantially separate *monolingual* domains within all bilingual individuals as well as within the bilingual *society* as a whole. This separation, particularly insofar as it preserves a monolingual home and a monolingual (although differently lingual) school and church, guarantees the stability of widespread bilingualism.

3. Unstable Intragroup Bilingualism

Although widespread bilingualism is the conscious or unconscious goal of many who sponsor the teaching of English to speakers of other languages,[2] there are some who aspire to even greater "success," namely that form of bilingualism which is marked by the constant displacement of the non-English mother tongue. This occurs when predominantly coordinate bilingualism is converted into predominantly compound bilingualism,[3] when domain separation vanishes, and when either available language may be employed under most circumstances, between most interlocutors, at will.

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[2] If English becomes a "widespread" second language abroad, the dangers that new varieties of standard English will ultimately come into being are intensified rather than reduced. It is obviously easier for translators and for elites (than for masses of students and teachers) to remain in close touch with British or American norms and to be corrected by exposure to these norms.

[3] Einar Haugen briefly defined and illustrated the difference between coordinate and compound bilingualism at the 1964 Conference on Teaching English to Speakers of Other Languages. (See *On Teaching English to Speakers of Other Languages: Series I*, p. 84.) Further details (and references) concerning this distinction may be found in Appendix II of my *Language Loyalty in the United States* (The Hague: Mouton, 1965).

Just as intergroup bilingualism may develop into elitist bilingualism under particular sociocultural conditions, and just as elitist bilingualism, in turn, tends to develop into widespread bilingualism under other sociocultural conditions, so there are yet other conditions that tend to change widespread, *stable* intragroup bilingualism into *unstable* intragroup bilingualism. Among the latter conditions are any that tend to weaken the authority of the parents and the nuclear family, or that tend to vitiate the hold of the church (or the school, or other traditional forces), or that tend to establish a new economic or cultural elite from among a hitherto illiterate or predominantly monolingual segment of the population. Widespread and rapid secularization, urbanization, and industrialization will often upset the delicate balance required for the domain separation and the coordinate bilingualism upon which stable, widespread intragroup bilingualism is based. Particularly where these processes of sociocultural change are fed from the outside they are likely to be associated with only one of the languages involved in the formerly stable period.

These are the very kinds of changes that have increasingly displaced Irish Gaelic and Welsh in the British Isles, American immigrant languages (even those with numerous and concentrated speakers, such as French and German, in the United States, Low German [Sassich] in Germany [which, in previous centuries, had also been spoken in Sweden], Breton in Brittany, Landsmaal in Norway, and countless tribal-local languages in developing nations throughout the world). As a result of such changes, children hear both languages spoken in their home environment from early childhood, rather than only the one language which has traditionally been "the language of the home." Children begin to speak what was hitherto the "school language" or the "government language" or the "church language" or the "business language" to each other, almost regardless of whether their parents address them or each other in that language. Interference between the two languages is common in within-group circles since not only does everyone know both languages (this is usually true under conditions of widespread stable intragroup bilingualism as well), but also there is no cultural norm requiring the standard version of a particular language for particular situations, as was heretofore the case. Language displacement is the linguistic counterpart of rapid social change, social disorganization, and social reorganization.

Stable, widespread, intragroup bilingualism is characterized by childhood monolingualism en route to adolescent and adult bilingualism. Unstable intragroup bilingualism is initially characterized by childhood bilingualism en route to adolescent and adult monolingualism. However, it is not long before successive age groups show *differential rates* of bilingualism (the older folks more often being more bilingual than the younger ones) or before successive generations of young folks show *decreasing rates* of bilingualism. The road to monolingualism can be a rapid one indeed. In the U.S.A. an entire continent of immigrants has been rendered almost linguistically homogeneous by the interaction between social change and language shift within the brief span of three generations.

Today, Mexican-Americans remain the only truly substantial island of stable, widespread, intragroup bilingualism in the United States. As such, they merit the special attention of those who would seek to maintain our standing with respect to a crucial non-English language resource (the Spanish language), as well as the special attention of those interested in teaching English. There is ample evidence that the American pattern of inundating other languages and cultures via a combination of technical "know-how" and consumer goods in English wrappings is not a particularly popular one in many parts of the globe. There is also ample evidence that this is not a necessary approach to the adoption of English among speakers of other languages. We seem to have accepted the viability and the desirability of stable, widespread bilingualism in some of our efforts abroad. The time has surely come for us to learn this lesson at home as well.

IV. Materials and Aids: Their Preparation and Use

Kenneth Croft
THE LANGUAGE LABORATORY: USES AND MISUSES

Francis C. Johnson
THE USE OF VISUAL STIMULI TO ELICIT CONTROLLED LINGUISTIC RESPONSES

THE LANGUAGE LABORATORY: USES AND MISUSES

Kenneth Croft

A Little Bit of History

As most of you are aware, the concept of the language laboratory which we have today is not very old. Most of our experience with labs has been gained within the last fifteen years or so—since World War II. Our experience with audio devices, however, dates back a little farther. Before and during World War II, some of you may have had occasion to use facilities at your own school for listening to language records or for practicing language lessons with dictaphones or soundscribers.

The notion of the language laboratory certainly didn't loom large in those days probably because the playback and recording equipment was rather primitive compared with what we have nowadays. The low fidelity of the recordings severely limited their usefulness in foreign language study. My opinion at the time, as I recall, was that recording and listening devices available were useful for teaching intonation, but that was about all.

With the coming of high fidelity sound reproduction, the language laboratory began to take shape. During the last ten years or so there has been a virtual boom in the manufacture of lab equipment—tape recorders, headsets, microphones, recording tape, and soundproofing. There have been other markets for the same kinds of equipment, and because of the intense competition among manufacturers, we now have unusually fine and reasonably priced lab equipment.

The language laboratory as we know it today did not develop overnight. The term "laboratory" at the present time gives us a mental picture of several rows of separate compartments or booths, each enclosed on three sides to about eye level; the students can sit down at one of these booths, put on headphones, and practice a language lesson in semiprivacy. Also, the language laboratory is usually equipped with a console which can serve as a source for one or more programs; and the console ordinarily serves as a monitoring station for the teacher. This is the general picture, the result of many compromises, much experimentation, and ten to twelve years of experience.

Some of you may have seen earlier models of language laboratories, say, around 1950, which were much more elaborate than this. There were labs, for example, set up with fully enclosed booths—similar to telephone booths, but roomier—and each was equipped with two tape recorders: one for listening and the other for recording. Headsets were not necessary in this arrangement because the prevoiced material coming from the speaker of one machine was recorded along with the student's responses on the other machine.

The biggest boost to the popularity of the language laboratory seems to have come after the development of the binaural or stereo type of recorder. This kind of machine made lab operations much simpler and reduced the requirements for equipment and space. The binaural recorder gives the student prerecorded cues or stimuli to respond to and also records the student's responses to these cues or stimuli. Only one tape is needed for this purpose. The machine uses two tracks—the upper half of the tape for the cues, which can not be erased, and the lower half of the tape for the student's responses, which can be erased. We show the two tracks in the diagram below.

The shaded areas indicate voiced material.

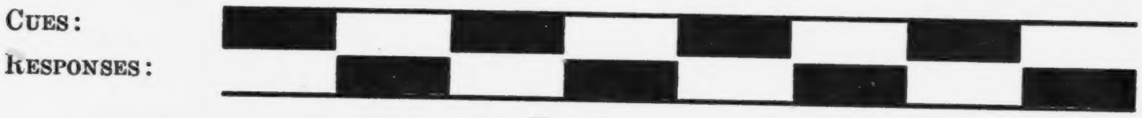

FIG. 1

When the student gets to the end of his lesson, he can then listen to his own performance which has been recorded on the lower track, and the teacher can listen to it, too. The tape is reusable; the student's old responses are automatically erased each time he records new ones.

Literature on the Language Laboratory

There's a sizable body of literature on language laboratories—entire books, chapters in books, and hundreds of articles on the subject. Almost every issue of the *Modern Language Journal* has an article on some aspect of the language laboratory. I made no attempt to review all the literature before this conference. I reviewed some of it and made up a list of recent items which will guide you to fairly detailed treatments of laboratory planning, types of equipment, and using equipment to best advantage. This is the bibliography at the end of the paper. Virtually all the literature has to do with the teaching of foreign languages to American students, but the experience, the advice, and the conclusions, to a large extent, are equally applicable to the teaching of English to speakers of other languages.

Chapter 17 of Lado's book (item 7 on the bibliography) provides a good summary of general laboratory practices. Hutchinson's survey (item 6) deals with current practices in high school labs; his book also contains a glossary of laboratory terms and an excellent bibliography up to 1961. The Hayes pamphlet (item 3) is especially useful for planning and selecting equipment for the laboratory according to the requirements and standards of different schools. Stack's book (item 9) describes and illustrates a large variety of drills and exercises and tests for use in the lab, and it also provides a good deal of information about procedures in operating a lab; this book, I should mention, is undergoing an extensive revision, and a second edition will appear, I think, sometime this year. I will refer to some of these publications again and mention others later. One very important matter which needs still more attention than that given in the literature is the making of master tapes. This is something, of course, that requires a good deal of practice. I suppose the best guidance is found in the leaflets supplied by the manufacturers of tape recorders; but the voicing and recording of good master tapes is no simple chore, and lab directors and supervisors should have thorough training in this aspect of lab operations.

Types of Laboratories

Lado defines the language laboratory as a special room for students to practice with sound equipment—a place where students get audiolingual practice outside of class. The amount and types of equipment are not specified. The equipment may range from nothing more than one simple playback machine and some chairs to the complete package type of laboratory offered by some manufacturers with an elaborate console, an overhead projector, synchronized tape and filmstrip apparatus, every booth equipped with a binaural machine, etc.

Binaural machines, of course, make the lab more versatile. These machines make possible about every kind of lab activity that's been devised. Stack describes two modes of operation in the laboratory—the broadcast mode and the library mode; these in part depend on the equipment available.

The *broadcast* mode refers to activities in which all the students of a class are doing the same thing at the same time—that is, responding to the same cues which come from a tape played at the console. The individual booths may have nothing more than headphones and a selector switch; the students select the program desired, listen to the cues, and speak into the air. With a microphone, together with headphones, in each booth and appropriate wiring to the console, a monitoring system can be set up, so the teacher can hear the students' performance and give guidance on individual problems or difficulties. If the headphones are audioactive, the students can hear their own responses.

The *library* mode refers to the activities of a student working alone at his own speed. Of course, a laboratory equipped for the library mode can do everything the broadcast type can do. Besides headphones, microphone, and a selector switch, each booth has a binaural tape recorder, and the student works with his own prerecorded tape. The student's responses are recorded on the student track of the tape he uses.

For reasons of economy, many laboratories are set up as combinations of the two types. Some booths have tape recorders, but most booths have only headsets and mikes. There is no reason why these combinations shouldn't work out very well. Our experience at the American Language Institute bears this out, I believe. It took us four years to get a fully equipped lab. The first year—in 1961—our lab was entirely of the broadcast type, with a console and thirty-six student positions arranged in six rows. The second year we installed tape recorders in twelve booths, the third year twelve more, and this past year, the final installation was completed. After the first year we were able to use the combination approach—some students operating according to the broadcast mode and others according to the library mode.

Effectiveness of the Lab

The literature concerned with the effectiveness of the language laboratory seems to give more attention to how labs are being used and less attention to the type of equipment used. Hutchinson's pamphlet (item 5 on the bibliography) makes five points, which are fairly representative in evaluation studies concerning language labs. It is worthwhile, I think, to note these here:

> First, the teacher must be interested in getting the most out of the equipment and materials; and he must have some skill in the effective use of these aids in helping students develop skills of listening and speaking with comprehension.
>
> Second, the teaching materials must be designed not only to develop the listening and speaking skills efficiently but also to integrate class and laboratory work.
>
> Third, the testing and grading program must give due weight to achievement in listening and speaking.
>
> Fourth, the practice sessions must be frequent enough and long enough to enable students to develop the skills of listening and speaking.
>
> Fifth, the equipment must be good enough and flexible enough to permit efficient operation on a regular basis.

You notice the order in which he lists the five elements which make for effectiveness: (1) the teacher, (2) the teaching materials, (3) the testing and grading program, (4) the student practice sessions, and (5) the equipment. Equipment is noted last.

Hutchinson also summarizes a number of completed research studies concerning the language lab and mentions specific points indicated by the research. For example, in working with groups of French students—experimental groups and control groups—it was found that students who had only one lab practice period a week made no more gains than those in the control group. But students who had daily practice made dramatic gains. It was also shown that positive results could be achieved with two lab periods per week. Another study suggests that audioactive headphones are probably superior to unactivated headphones in the teaching of pronunciation. This same study indicated that the instructor's reinforcement of the student's self-correction and practice is extremely important.

Hutchinson also reports on an experiment to determine whether students of German would have more skill in reading and writing after two years if they were taught by the audiolingual method (including lab practice) instead of the grammar-and-reading method. At the end of the two-year period, the traditional students were about the same as the audiolingual students in reading, but the traditional students were superior in writing: the traditional students were also superior in translating from German to English, but in translating from English to German the groups were about equal. In speaking, as you might expect, the audiolingual students were far superior.

Preliminary reports of long-range studies of language laboratories already indicate that labs help students appreciably in learning foreign languages more efficiently.

Internalizing Structural Patterns

I was asked to spend part of the time here today talking about the kinds of drills which are best or at least suitable for the language laboratory. This can perhaps be accomplished most effectively by describing and illustrating some of the drills we have prepared for use in our own lab and mentioning others which I have observed in use at other labs.

As I mentioned earlier, Stack's book notes a large variety of drills. Lado's book describes and illustrates several kinds, too. And a large part of the volume edited by Gravit and Valdman is devoted to exercises and drills for the language laboratory.

In connection with the last item mentioned, *Structural Drill and the Language Laboratory* (item 2 on the bibliography), we should note that most drills designed for the language laboratory are "structural" drills. The terms "structural drill" and "pattern practice" seem to be pretty much synonymous. Such drills are developed to help the student internalize certain structures or patterns on all three levels: phonological, morphological, and syntactical. "Internalize," by the way, is just another way of saying "learn to manipulate automatically." If we internalize a pattern, we learn to manipulate the pattern automatically.

We should also note that most drills designed for the language laboratory so far were prepared for first- and second-level language students. At our own Institute this corresponds roughly to elementary and intermediate students. Experimental material for higher level students has been prepared at several institutions, but I'm not sure that any of it is generally available as yet.

A large segment of the drill material at our Institute is set up according to Stack's anticipation mode in four phases:

	1	2	3	4
CUE:	Stimulus		Corrected Response	
RESPONSE:		Attempted Response		Repetition

FIG. 2

1. Cue is prerecorded.
2. PAUSE. The student responds. He anticipates the correct answer.
3. The correct response is also prerecorded.
4. PAUSE. The student repeats the correct response.

Let's see how this works with a concrete example, say, the substitution of a pronoun for a noun object:

	1	2	3	4	
CUE:	I see the house.		I see it.		Bob hears . . .
RESPONSE:		I it see.		I see it.	

FIG. 3

Laboratory practice, to my way of thinking, is merely supplementary to classwork. The goals of the classroom experience, then, also apply to the laboratory experience, at least in regard to listening and speaking. From this point of view, four main types of drills appear to be most appropriate: those involving imitation, substitution, expansion, and transformation.

Imitation and Substitution Drills

Imitation drills are the easiest to devise and probably the most basic. The instructions to the students are simply "Repeat after me" or "Repeat after us." One popular type is drill on minimal pairs—words in pairs or in groups of three or four, which differ by one phoneme. For example, for practicing the *l-r* distinction in word-initial position, a drill might consist of such pairs as *lead-read, light-right, long-wrong,* etc. Another widely used kind of imitation drill is the dialogue for memorization. The utterances are broken up into small segments, and pauses are inserted after each segment to allow for student repetition. It goes without saying that the sentences and phrases should be short, particularly at the start; long utterances for repetition spread the student's attention over too wide a variety of details. There is a tendency on the part of many teachers to slow down the tempo in recording dialogue drill material. A little of this can be done without affecting the naturalness of speech; some people ordinarily talk slower than others. But a good deal of slowing will result in distortion, which should be avoided. Also, exaggeration of certain sound features should be avoided, such as overloudness of stressed syllables or extra high pitch where only normal high pitch is required.

Substitution drills afford practice on grammatical patterns, intonation patterns, and vocabulary. These are ordinarily prepared with frames, with one, or sometimes two, slots to be filled by the student. The drillmaker may select pattern sentences from previously memorized material, or he may devise new pattern sentences for the purpose. Let's take a pattern sentence like

Why did he bring the *watch?*

In place of *watch* we might substitute *key, pen, brush, car, note.* The objective would not ordinarily be the learning of these vocabulary items. The substitution of vocabulary in a frame focuses the student's attention on one slot—away from some pattern or pronunciation habit the teacher hopes to make automatic for the student. In this case it might be the word order for one type of interrogative question: question word, auxiliary, subject, verb, etc.; or, it might be the loss of "h" in "he" following an auxiliary in rapid speech. After setting up the frame with proper intonation, rhythm, etc., the drill is carried out by cues consisting of one word at a time which the student puts into the substitution slot.

Expansion and Transformation Drills

Expansion drills involve the addition of utterances or parts of utterances to the cues given. A widely used expansion drill provides practice on tag questions. For example, let's take a sentence like

John works hard.

The student, following his instructions, might be expected to say

John works hard, doesn't he?

After the placement of "doesn't he" becomes familiar, the subject of the sentence can be changed to *Mary* for a while to elicit "doesn't she" in the response and then, perhaps, to a plural noun to elicit "don't they," etc. After that, the subjects can be mixed, so that an element of choice is introduced—that is, the choice of "doesn't he," "doesn't she," or "don't they" depending on the subject of the cue sentence. Many of the teaching objectives which apply to substitution drills also apply to expansion drills.

Transformation drills are plentiful in the average foreign language textbook, including textbooks for English as a second language. Like substitution drills, they are useful for internalizing structural patterns. The term "transformation" has caused a little confusion, because it is also used in connection with certain kinds of grammatical analysis and presentation. But exercises involving transformation within sentences have been around a long time, familiar to language teachers in such instructions as "change the statements to questions" or "change the sentences to the passive."

Probably the easiest transforms to manipulate are those which call for no additions or deletions. This kind can be illustrated by the simple change of statements with the verb *be* to questions:

The students are here.
Are the students here?

A change of intonation, of course, goes with the change of word order.

But in addition to shifting, transformation drills often involve other kinds of alterations, such as replacing one item with another, bringing in new items, or dropping parts of the sentence. Simply converting a sentence to the passive requires several simultaneous operations:

John completes the lesson.
The lesson is completed by John.

The *-s* ending is replaced by *-d*; the words *is* and *by* are added and located according to a pattern; the front of the sentence goes to the end, and the end goes to the front.

The last example shows a combination of drill types: substitution, expansion, and transformation. *Combination* drills seem to be more common than the "pure" types, since most drills require more than just one operation.

Summary

In summary, let me go back to the title of this presentation, "The Language Laboratory—Uses and Misuses." I have talked a good deal about *uses,* and by implication, mostly, have given some indications of *misuses.* I have shown, I think, that the language laboratory plays, or can play, an important role in the foreign language teaching program, including English as a second language.

The most significant point I have tried to make, and I will restate it here, is this: the main value of the language laboratory lies not so much in the kind of equipment you have, but in the way you make use of what you have.

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THE USE OF VISUAL STIMULI TO ELICIT CONTROLLED LINGUISTIC RESPONSES

Francis C. Johnson

I wish to present in this paper two specific instances of the use of visual or pictorial stimuli to elicit controlled linguistic responses in the teaching of English to speakers of other languages. The first instance concerns the terminal competencies required in learning a foreign language and the way in which pictures may be used as the most efficient and "controllable" way of developing these terminal competencies. The second instance concerns the practice of a new sentence pattern where pictures are used to enable such practice to take the form of real communication between a speaker and a hearer, and where the pictures provide not only the stimulus for a controlled linguistic response, but also a means of checking the accuracy of communication between a speaker and a hearer.

Writers of textbooks and methodology books on the teaching of English as a foreign language define the terminal competencies of language learning in many differing ways. Those who would advocate a scientific or linguistic approach tend to stress proficiency in terms of mastery of the sound system and grammatical structure of English. Others talk in more vague terms of the use of English in social communication or cultural understanding. One general point of concentration seems to be the proficient use of complete utterances or "sentences," and the teaching focus is on getting competence in the use of sentences of ever increasing complexity both in concept and form. Rarely do we find terminal competencies expressed in terms of units of language larger than the single sentence. Nor do we find teaching techniques outlined whereby units of language larger than the single sentence are systematically taught. Of course all writers give examples of exercises where sentences of different types are put together to form a story, discussion, or dialogue, but it is usually assumed that a new sentence pattern is added to a student's store of language when the student has learned to use that pattern in itself. Such an assumption may not be valid, and the teacher may need to take his language practice further and deliberately present the students with situations which will show them how the newly learned unit is linked with previously learned units.

In a cumulatively designed structural syllabus where new sentence patterns are linked to previously learned patterns and lead on to later patterns, the initial teaching focus at each stage of a programme will be on getting the student to use efficiently the particular sentence pattern at that stage of the programme. But the terminal competencies of language learning must be expressed not only in terms of the new unit but in terms of the way in which this new unit may be used with other previously learned units.

Pictures are widely used in EFL classrooms to give pupils practice in making up a number of sentences, all having the same sentence pattern. Pictures are extremely useful in this context for they provide a nonlinguistic cue or stimulus for which a linguistic response is required. These pictures are usually of single objects or situations which merely supply the substitution cue for the student. More advanced materials often supply more complex pictures which provide a number of opportunities for the practice of a single sentence pattern. Both types of pictures are of value to the language teacher, but the picture required after these is one which provides not only opportunity to practice the new sentence pattern, but the practice of that sentence pattern together with previously presented sentence patterns.

If our structural syllabus contains patterns in the following order

1. *This* is a *book.*
2. *John* is a *boy.*
3. *He* is *sitting down.*
4. *He* is *walking* to the *door.*
5. *He* is *near* the *door.*

(Substitutions are supplied for the italicized words.)

a picture which develops terminal competencies at stage 5 might include a boy sitting on a chair. Of that aspect of the picture the teacher might try to elicit sentences having patterns 1, 3, 5, e.g.,

That is a boy.
He is sitting down.
He is on the chair.

These sentences need not come from the one pupil, but they may be repeated as a complete unit after they have been elicited singly. The example, though extremely simplified, is intended merely to indicate the need for cumulative practice in selection of appropriate sequences of sentences at each stage of learning and that such practice represents more closely the terminal competencies of language learning than does proficiency in each new sentence pattern learned.

In the materials currently being produced by the TESL Materials Development Project under the direction of Gerald Dykstra, pictures are being used to practice language in a new way which makes a significant contribution to the concept of controlled language practice. Dr. Dykstra's idea is to establish a framework for the practice of new sentence patterns which is based on real communication between two pupils in a class which is divided into small groups of four, each group working independently during the practice session. In a typical language practice activity the small group may be divided into two teams, and each team may be required to complete a series of simple tasks by one team member giving instructions to his teammate on how to complete the task. The instructions are given through language alone. The teammate, following the instructions given him, then completes the task. Such a language practice activity will follow the presentation and initial pattern practice of a new sentence pattern.

The following simplified description of a language practice activity to practice the sentence pattern will illustrate the function of the picture:

Give me a	red	pen
	blue	pencil
		flower

On a table are red pencils, pens, and flowers and blue pencils, pens, and flowers. A pile of picture cards is face down in the centre of the table. Each card has on it a picture of either a red pencil, or a blue pen, or a red flower, etc. The students are seated around the table. One member of a team picks up a picture card and looks at it. (It has a picture of a blue pencil on it.) He does not show the card to his teammate but says to him, "Give me a blue pencil." The teammate picks up a blue pencil and gives it to him. The card is then shown to all students, and the object is matched with the card. If they match, then communication through language alone has taken place.

The picture card serves as a nonlinguistic stimulus to the speaker who uses it as the basis of his linguistic response. It also serves as a final check on whether or not communication took place between speaker and hearer. The speaker does not know beforehand which picture card will come to him for the cards are placed in random order face down on the table. The hearer learns of his task solely through language for he does not see the picture card that his teammate picked up.

The use of pictures in this way to practice sentence patterns provides a new dimension to language practice which is quite different from the more usual use of simply cuing for substitution within a pattern without any real communication or checks on what is being practiced, except the check of the teacher.

THE TESOL CONFERENCE AT SAN DIEGO

Sirarpi Ohannessian

When preparations were being made for the first national conference on the Teaching of English to Speakers of Other Languages held in Tucson, Arizona, on May 8 and 9, 1964, we were in a sense working in the dark because we had very little idea of the response we would get and the range of interests that would be represented among the participants. The enthusiastic response to the Tucson conference and the pattern set for it served as guidelines in planning the second national conference held in San Diego on March 12 and 13, 1965.

Favorable response to the San Diego conference was evident not only in the number of participants and their oral comments, but in the 83 returned questionnaires and subsequent letters from participants. Registered participants numbered 670, but actual attendance was estimated to be about 750. Participants came from 30 states and 11 foreign countries. Of the states represented, California had the largest number of participants with 410. Arizona was next with 53, the District of Columbia with 34, New Mexico with 30, New York and Texas with 18 each, Illinois with 14, Utah 11, and the remainder ranging from 6 to 1 participant each.

The varieties of areas represented in the field of TESOL are reflected in the information available on the occupation of participants. There were 220 teachers from preschool through elementary and high school to adult education classes. There were 163 administrators, including school principals and heads of departments. There were 152 college teachers, 15 consultants, 34 students, 25 representatives of government agencies, and 32 representatives of professional organizations, foundations, publishers, and so on. There were a few who did not indicate occupation.

Participants had been asked to check areas of special interest to them. Although a number of people indicated more than one category, the following figures may be of interest to readers: 252 elementary, 181 teacher training, 180 college teaching, 168 secondary, 144 adult, 117 overseas. Although the largest area indicated appears to be that of elementary education, the range between the others seems to indicate that there is approximately equal interest in all levels and areas of the field. Granted that this information only reflects the opinion of a comparatively small number of people at one conference in one geographical area, nevertheless it may be of considerable significance in planning future conferences and publications for teachers of English to speakers of other languages.

MINUTES OF THE SUMMATION AND PLANNING SESSION OF THE CONFERENCE ON TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Held in the International Room of the El Cortez Hotel, San Diego, California, on Saturday, March 13, 1965, from 1:45 to 2:45 p.m.
Chairman: Sirarpi Ohannessian
Recorders: Carol J. Kreidler, Robert J. Lacampagne

The first item on the agenda was a report by Harold B. Allen on the topic "Survey of the Teaching of English to Non-English Speakers in the United States." Dr. Allen gave a brief description of the plan of the survey and a summary of findings from the returned questionnaires, which represented only a small percentage of the total number sent. He reported that of the 347 questionnaires returned by teachers, 65 percent indicated that they felt that a new journal was necessary. Twenty-seven percent thought that articles in such a journal should emphasize theory; 44 percent would put emphasis on reports of experimental projects, 90 percent on practical suggestions for teaching, and 22 percent on book reviews.

The chairman then introduced Robert Lado, who reported on an informal meeting which was held in Chicago on January 30, 1965, on the possible organization of an independent association of teachers of English to speakers of other languages. Since a report on the meeting and on the background of the developments that had led to it had been distributed to all who registered for the conference, Dr. Lado presented only a summary. After naming the group which met in Chicago and giving some of the background events that preceded their meeting, he outlined the deliberations of the group, the agreements reached, and the timetable recommended for possible formation of an association.

He then announced the names of those nominated by the group in Chicago to serve on a working committee to study such matters as a draft constitution, bylaws, officers, funding, location of headquarters, etc.: Harold B. Allen, Charles A. Ferguson, Robert F. Hogan, Mary McDonald, Clifford H. Prator, Mamie Sizemore, and Sirarpi Ohannessian, interim secretary. The committee would submit its proposals to participants at the spring 1966 TESOL conference, to be held in New York.

Dr. Lado asked for endorsement of the committee and for any additional nominations. It was moved and seconded that the committee be endorsed as recommended.

An amendment to the motion of endorsement was made and seconded, empowering the working committee to invite additional members if it felt it was advisable to enlarge the committee.

The motion to endorse the committee, which will make recommendations pertinent to the formation of the proposed organization and present them at the business meeting of the spring 1966 TESOL conference, was unanimously carried.

The question of the advisability of a spring meeting was raised. James R. Squire, Chairman of the TESOL Steering Committee, pointed out that commitments had been made for the next two years. He also announced the dates of the next meeting as March 18 and 19, 1966, and that this meeting will be held in New York City.

Mary Finocchiaro made a motion of "thank you for a stimulating and rewarding conference." After applause the meeting was adjourned.

CONFERENCE PROGRAM

Friday Morning, March 12—9:00 a.m. to 10:15 a.m.

GENERAL SESSION

Presiding: Sirarpi Ohannessian
Director, English Program, Center for Applied Linguistics

Welcome: Cecil Hardesty
San Diego County Superintendent of Schools

Address: "Linguistics and the Teaching of English to Speakers of Other Languages"
W. Freeman Twaddell
Chairman, Departments of German and Linguistics, Brown University

Address: "Applied Linguistics and Language Teaching"
Robert Lado
Dean, Institute of Languages and Linguistics, Georgetown University

Friday Morning, March 12—10:45 a.m. to 12:15 p.m.

PROGRAM I *Basic Concepts in the Application of Linguistics to Elementary and Secondary Classroom Instruction in English as a Second Language*

Chairman: Harry Freeman
Head, Language Administration Section, Office of International Training, Agency for International Development

Associate Chairman: Emily B. Roberts
Assistant Professor, Department of English, San Francisco State College

Speakers: "Teaching Spoken English"
Betty Wallace Robinett
Associate Professor, Department of English,
Ball State University
"Teaching Written English"
Virginia F. Allen
Lecturer, Department of English and Foreign Languages,
Teachers College, Columbia University

Discussants: Robert Rexer
Mt. Miguel High School, Spring Valley, California
Elizabeth W. Willink
Rock Point Boarding School, Chinle, Arizona

Friday Morning, March 12—10:45 a.m. to 12:15 p.m.

PROGRAM II *Making the Best Use of Technological Aids*

Chairman: Edwin Cornelius
President, English Language Services, Inc., Washington, D. C.

Associate Chairman: Robert C. Goodell
Chief, Radio English Teaching Branch, Voice of America,
United States Information Agency

Speakers: "The Use of Visual Stimuli to Elicit Controlled Linguistic Responses"
Francis C. Johnson
Teachers College, Columbia University
"The Language Laboratory—Uses and Misuses"
Kenneth Croft
Acting Director, American Language Institute, Georgetown University
"The Use of Motion Pictures in Foreign Language Instruction"
Joseph R. Applegate
Center for Research in Languages and Linguistics, University of California,
Los Angeles

Discussants: Marjorie C. Streiff
Wakefield Junior High School, Tucson, Arizona
LeRoy Condie
Language Consultant, Division of Indian Education,
State Department of Education, New Mexico

Friday Morning, March 12—10:45 a.m. to 12:15 p.m.

PROGRAM III	*The Training of Teachers of English to Speakers of Other Languages: Programs in the United States*
Chairman:	Keith K. Eggers Acting Chief, International Teacher Development Section, Bureau of International Education, U. S. Office of Education
Associate Chairman:	William F. Marquardt Coordinator, Programs in Teaching English as a Second Language, School of Education, New York University
Speakers:	"Teacher Training for TESL in Degree and Certificate Programs" J. Donald Bowen Associate Professor, Department of English, University of California, Los Angeles "Teacher Training in Short-Term Programs" Edward M. Anthony Chairman, Department of General Linguistics, University of Pittsburgh "Inservice Training of Teachers: New York City" Dora Pantell Curriculum Consultant in Adult Education, Bureau of Curriculum Research, New York City Board of Education
Discussant:	R. Ethelyn Miller Education Specialist, Bureau of Indian Affairs, U. S. Department of the Interior

Friday Morning, March 12—10:45 a.m. to 12:15 p.m.

PROGRAM IV	*Cultural Problems in the Teaching of English as a Second Language*
Chairman:	Sheila M. Goff Associate Professor, Department of Speech, Ohio State University
Associate Chairman:	David P. Harris Director, TOEFL
Speakers:	"Dysfunctional Effects of Learning English as a Second Language: The Mexican-American Example" William Madsen Professor, Department of Anthropology, Purdue University "Culture: The Content of Language" Hildegard Thompson Chief, Branch of Education, Bureau of Indian Affairs, U. S. Department of the Interior
Discussant:	Herbert Ibarra District Resource Teacher, Foreign Languages, San Diego City Schools

Friday Afternoon, March 12—1:45 p.m. to 3:15 p.m.

PROGRAM V	*Demonstration Class: Elementary Level*
Chairman:	Lois McIntosh Associate Professor, Department of English, University of California, Los Angeles
Associate Chairman:	William E. Norris Lecturer, English Language Institute, University of Michigan
Demonstration Teacher:	Serafina Krear Salinas Elementary Schools, Salinas, California
Discussants:	Robert Long Principal, Lowell School, San Diego, California Lillian Halsema Byer School, San Ysidro, California

Friday Afternoon, March 12—1:45 p.m. to 3:15 p.m.

PROGRAM VI	*The Use of English as a Medium of Instruction for Other Subjects*
Chairman:	Hugh Dick Chairman, Department of English, University of California, Los Angeles
Associate Chairman:	Biloine Young Gallup, New Mexico

Speakers: "Problems in the Use of English as a Medium of Instruction for Other Subjects"
Peter Strevens
Director, Language Center, University of Essex, Colchester, England
"The Curriculum Is a Language Art"
Alva L. Davis
Professor, Department of English and Linguistics, Illinois Institute of Technology
"The Teaching of Mathematics in Africa Through the Medium of English"
Shirley Hill
Associate Professor, School of Education, University of Missouri

Discussant: Lilia R. Cortez
Assistant Professor, Department of English and the Graduate School,
Philippine Normal College, Manila

Friday Afternoon, March 12—1:45 p.m. to 3:15 p.m.

PROGRAM VII *Opportunities for Service in the Teaching of English to Speakers of Other Languages*

Chairman: Melvin J. Fox
Associate Director, International Training and Research Program,
The Ford Foundation

Associate Chairman: David W. Reed
Professor, Department of English, University of California, Berkeley

Speakers: "Opportunities for Service in Programs Sponsored by Nongovernment Institutions"
J Milton Cowan
Director, Division of Modern Languages, Cornell University
"Opportunities for Service Offered by Government Agencies"
Trusten W. Russell
Executive Associate, Committee on International Exchange of Persons,
Conference Board of Associated Research Councils, Washington, D. C.
"Opportunities for Service in State Educational Systems"
James E. Alatis
Specialist for Research, Language Research Section,
Division of College and University Assistance, U. S. Office of Education

Friday Afternoon, March 12—1:45 p.m. to 3:15 p.m.

PROGRAM VIII *Bilingual Education*

Chairman: Mildred Boyer
Associate Professor, Department of Romance Languages, University of Texas

Associate Chairman: Stanley M. Tsuzaki
Assistant Professor, Department of Linguistics, University of Hawaii

Speakers: "Bilingualism in the United States and Elsewhere: Some Sociological Contrasts"
Joshua A. Fishman
Professor, Department of Psychology,
Yeshiva University
"Intellectual and Social Advantages of Bilingualism"
Wallace E. Lambert
Center for Advanced Study in the Behavioral Sciences, Stanford, California
(On leave, McGill University, Montreal, Canada)
"The Miami Experience in Bilingual Education"
Pauline M. Rojas
Director, Ford Foundation Project, Dade County Public Schools, Miami, Florida

Discussant: J. L. Logan
Principal, Coral Way Elementary School, Miami, Florida

Friday Afternoon, March 12—3:30 p.m. to 4:30 p.m.

CONSULTANT SESSIONS

DISCUSSION GROUP 1: *Teaching English as a Second Language in Elementary Schools*

Chairman: Stanley Levenson
Curriculum Coordinator, Foreign Languages,
San Diego County Department of Education

Recorder: Donald Boyer
Division of Elementary Education, San Diego City Schools, California

Consultants: Paul Bell
Coordinator, Special English, Dade County Public Schools, Miami, Florida

Mary Finocchiaro
Professor, Department of Education, Hunter College of the
City University of New York

Wayne Holm
Principal, Red Rock Boarding School, via Chinle, Arizona

E. Roby Leighton
E. Roby Leighton and Associates and University of Arizona

Elsie Wolk
Principal-in-charge, Education of the Non-English Speaking Child,
Division of Elementary Schools, Board of Education of the City of New York

Friday Afternoon, March 12—3:30 p.m. to 4:30 p.m.

DISCUSSION GROUP 2: *Teaching of English as a Second Language in Secondary Schools*

Chairman: William Slager
Associate Professor, Department of English, University of Utah

Recorder: Priscilla Trowbridge
Department of English, Arizona State College

Consultants: Marie de Carli
Instructor, Department of Foreign Languages, San Francisco State College

Merrill V. Goudie
Consultant, Secondary Education, Los Angeles County Schools, California

Paul Streiff
Safford Junior High School, Tucson, Arizona

Virginia Williams
Department of English, University of Arizona

Friday Afternoon, March 12—3:30 p.m. to 4:30 p.m.

DISCUSSION GROUP 3: *Teaching English as a Second Language in Adult Education Classes*

Chairman: Jesse J. Villarreal
Chairman, Department of Speech, University of Texas

Recorder: Maybelle Cox
American Language Institute, Georgetown University

Consultants: Patricia Bishop
San Diego City Schools, California

Judson P. Bradshaw
Principal, Hoover Adult High School, San Diego, California

Gordon Ericksen
Director, American Language Institute, New York University

Jean Jacobs
Americanization Coordinator, Adult Education Division,
Sacramento City Unified School District

Byrl E. Robinson
Supervisor, Citizenship and Elementary Education,
Los Angeles City School Districts, California

Friday Afternoon, March 12—3:30 p.m. to 4:30 p.m.

DISCUSSION GROUP 4: *Teaching English as a Second Language in College and University Classes*

Chairman: Edith C. Trager
Associate Professor, Department of English, San Jose State College

Recorder: Wallace L. Pretzer
Instructor, Department of English, Bowling Green State University

Consultants: Eva Currie
Department of Speech, University of Texas

Dorothy Danielson
Assistant Professor, Department of English, San Francisco State College

Angela Paratore
Department of Linguistics, Indiana University

Charles T. Scott
Assistant Professor, Department of English, University of Wisconsin

Friday Afternoon, March 12—3:30 p.m. to 4:30 p.m.

DISCUSSION GROUP 5: *Administration of Teaching English as a Second Language Programs in State Educational Systems*

Chairman: Everett V. O'Rourke
Consultant, Bureau of Secondary Education, State Department of Education, California

Recorder: Beryl Dwight
Program Assistant, English Program, Center for Applied Linguistics

Consultants: Eugene DeGabriele
Consultant in Adult Education, State Department of Education, California
Edith K. Donlevy
Dool School, Calexico, California
Juan Solis
Principal, Jefferson School, Carlsbad Union School District, California
Dorothy Zeyen
Coordinator, Language Arts, Educational Services Division, Orange County Schools, Santa Ana, California

Friday Afternoon, March 12—3:30 p.m. to 4:30 p.m.

DISCUSSION GROUP 6: *The Preparation of Teachers of English to Speakers of Other Languages*

Chairman: Richard C. Sittler
Director, English Language Institute, University of Hawaii

Recorder: Robert M. Ventre
Director of Courses, Institute of Modern Languages, Inc., Washington, D. C.

Consultants: Ann T. Anthony
Lecturer, English Language Institute, University of Michigan
Marie Gadsden
Regional Officer, West Africa, Division of University Relations and Training, Peace Corps
Thomas Hopkins
Education Specialist, Federal School Operation Section,
Field Technical Unit, Brigham City, Utah
Carol J. Kreidler
Program Associate, English Program, Center for Applied Linguistics

Friday Afternoon, March 12—4:30 p.m. to 5:30 p.m.

ORGANIZATIONAL GET-TOGETHER

An Opportunity to Meet Informally with Representatives of Various Associations and Agencies

Friday Evening, March 12—7:00 p.m. to 9:30 p.m.

BANQUET

Presiding: William Work
Executive Secretary, Speech Association of America

Address: "English Language Capability: A World Demand"
Philleo Nash
Commissioner, Bureau of Indian Affairs, United States Department of the Interior

Saturday Morning, March 13—9:00 a.m. to 10:15 a.m.

GENERAL SESSION

Presiding: James R. Squire
Professor of English, University of Illinois; Executive Secretary,
National Council of Teachers of English

Address: "Teaching English Overseas"
Clifford H. Prator
Vice-Chairman, Department of English, University of California, Los Angeles

Address: "Teaching English to Speakers of Other Languages: Problems in California"
Afton Dill Nance
Consultant in Elementary Education, State Department of Education, California

Report: "The NDEA Summer Institutes on Teaching English as a Second Language"
David P. Harris
Director, Testing of English as a Foreign Language (TOEFL Program)

Saturday Morning, March 13—10:45 a.m. to 12:15 p.m.

PROGRAM IX *Teaching Reading to Speakers of Other Languages*

Chairman: Jayne Harder
Director, English Language Institute; Associate Professor, Departments of English and Speech, University of Florida

Associate Chairman: Iris Shah
University of California, Los Angeles

Speakers: "Reading as Skill, Structure, and Communication"
Charles W. Kreidler
Head, Division of Applied Linguistics, Institute of Languages and Linguistics, Georgetown University

"Constructing a Developmental Reading Program for Children Who Speak Other Languages: Basic Criteria"
Ralph F. Robinett
Assistant Director, Ford Foundation Project, Dade County Public Schools, Miami, Florida

Discussants: Ruth Strang
Professor, College of Education, University of Arizona

William M. Kendrick
Curriculum Coordinator, Language Arts, and Director, Reading Research Project, Department of Education, San Diego County, California

Saturday Morning, March 13—10:45 a.m. to 12:15 p.m.

PROGRAM X *Teaching English in Adult Education Programs*

Chairman: Arthur J. Bronstein
Professor, Department of Speech, Queens College of the City University of New York

Associate Chairman: Patricia H. Cabrera
Coordinator, General Adult Education, Dade County Public Schools, Miami, Florida

Speakers: "The Noncompulsory Adult Student Learns English"
Byrl E. Robinson
Supervisor, Citizenship and Elementary Education, Los Angeles City School Districts

"Teaching English with Your Foot"
Gustave Mathieu
Associate Professor, Department of German, California State College

"A Partial Application of Linguistic Theory in Classrooms Where English Is Taught in the Classroom"
Dale E. Hendrickson
Teacher, Berkeley Evening High School, Berkeley, California

Discussant: William Tresnon
Registrar, John Adams Adult High School, San Francisco, California

Saturday Morning, March 13—10:45 a.m. to 12:15 p.m.

PROGRAM XI *The Training of Teachers of English to Speakers of Other Languages: Programs Overseas*

Chairman: Richard M. Key
Acting Chief, English Teaching Division, Information Center Service, United States Information Agency

Associate Chairman: Ralph P. Barrett
Assistant Professor, English Language Center, Michigan State University

Speakers: "The Challenge of Short-Term Seminars"
Mary Finocchiaro
Professor, Department of Education, Hunter College of the City University of New York

"Teacher Training in the Philippines"
Bonifacio Sibayan
Head, Language Study Center, Philippine Normal College, Manila

"Teacher Training in the Far East"
David DeCamp
Associate Professor, Department of English, University of Texas

Discussants: John F. Green
University of California, Los Angeles
Russell Campbell
Assistant Professor, Department of English, University of California, Los Angeles

Saturday Morning, March 13—10:45 a.m. to 12:15 p.m.

PROGRAM XII *Three Different Approaches to the Treatment of a Grammatical Problem in English: The Relation between Forms of the Type "He works" and "He is working"*

Chairman: Charles A. Ferguson
Professor, Department of Linguistics, University of Washington
(On leave, Center for Applied Linguistics)

Associate Chairman: Jesse Sawyer
Lecturer in Linguistics, University of California, Berkeley

Speakers: "A Signals Grammar Approach"
Martin Joos
Visiting Director, Center for Applied Linguistics
(On leave, University of Wisconsin)
"Item and Field: A Way into Complexity"
Alton Becker
Instructor, Department of Linguistics, University of Michigan
"A Generative Grammar Approach"
Robert B. Lees
Head, Department of Linguistics, University of Illinois

Saturday Afternoon, March 13—1:45 p.m. to 3:15 p.m.

SUMMATION AND PLANNING SESSION

Chairman: Sirarpi Ohannessian
Director, English Program, Center for Applied Linguistics

Recorders: Carol J. Kreidler
Program Associate, English Program, Center for Applied Linguistics
Robert Lacampagne
Director of Special Projects, National Council of Teachers of English

Speaker: "Report on a Survey of the Teaching of English to Non-English Speakers in the United States"
Harold B. Allen
Professor, Department of English, University of Minnesota

Saturday Afternoon, March 13—3:30 p.m. to 5:00 p.m.

PROGRAM XIII *Experiences in the Teaching of English on the Elementary Level*

Chairman: Adela Méndez
Director, English Section, Puerto Rico Department of Education, Hato Rey

Associate Chairman: Ruth Fifield
Director of Special Programs, Imperial County Education Center, El Centro, California

Speakers: "Organizing Content for the Bilingual Child"
Elizabeth Ott
Administrative Assistant, Cooperative Research Project 2648,
College of Education, University of Texas
"Don't Hide Your Language"
Beatrice Estrada
Language Coordinator, Gallup-McKinley County Schools,
Tohatchi Public Schools, New Mexico
"Spanish Plus English"
Virginia Dominguez
Hammel Street School, Los Angeles, California

Discussant: Ottilie R. Chomiak
Carlsbad Union School District, California

Saturday Afternoon, March 13—3:30 p.m. to 5:00 p.m.

PROGRAM XIV *Experience in the Teaching of English on the Secondary Level*

Chairman: Betty Wallace Robinett
Associate Professor, Department of English, Ball State University

Associate Chairman: Katharine O. Aston
Director, Programs in English as a Second Language, University of Illinois

Speakers: "Teaching English to Secondary Students"
Edward Hanson, Jr.
Coordinator, English as a Second Language, Monterey County Office of Education, Salinas, California

"The Development of Oral Skills for Speakers of Spanish"
Henry W. Pascual
Modern Foreign Languages Specialist, State Department of Education, New Mexico

Discussant: Frank Cuenca
Memorial Junior High School, San Diego, California

Saturday Afternoon, March 13—3:30 p.m. to 5:00 p.m.

PROGRAM XV *Testing*

Chairman: Richard Beym
English Language Advisor, Research and Standards Division, Defense Language Institute, Washington, D. C.

Associate Chairman: Robert L. Saitz
Department of English, Boston University

Speakers: "Testing Aptitude for English: Review and Prospect"
Paul D. Holtzman
Director, Language Testing Center, Pennsylvania State University

"Problems of Measuring the Achievement of Children Learning English as a Second Language"
W. Preston Gleason
Guidance Coordinator, San Diego County Schools, California

"Statistical Study of the Prediction of Language Achievement of Foreign Students"
Sydney Sako
Chief, Measurements Section, Language School, United States Air Force, Lackland Military Training Center, Texas

Discussant: James E. Alatis
Specialist for Research, Language Research Section, Division of College and University Assistance, U. S. Office of Education

Saturday Afternoon, March 13—3:30 p.m. to 5:00 p.m.

PROGRAM XVI *Research in Teaching English as a Second Language*

Chairman: George L. Anderson
Associate Executive Secretary and Treasurer, Modern Language Association of America

Associate Chairman: Myron Vent
Education Resources Officer, Education and Human Resources Development Service, Office of Technical Cooperation and Research, Agency for International Development

Speakers: "The Significance of Aural Comprehension"
John W. Black
Professor, Department of Speech and Director of Speech and Hearing Science, Ohio State University

"The Development of Self-Instructional Materials for Teacher Training"
Aileen T. Kitchin
AID Research, English Language Services, Inc., Washington, D. C.

"New Research for TESL Materials"
Gerald Dykstra
Coordinator of EFL Programs and Director of the Materials Development Center, Teachers College, Columbia University

"Research News in the Teaching of English as a Second Language"
J. C. Catford
Director, English Language Institute, University of Michigan